

Advanced Techniques of
HYPNOSIS AND THERAPY

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*I wish to express deep
and sincere appreciation to
the late Bernard E. Gorton, M.D.
and
André M. Weitzenhoffer, Ph.D.
for the instigation and the preliminary organization
and editing of this collection of papers.*

MILTON H. ERICKSON, M.D.

Advanced Techniques of
HYPNOSIS AND THERAPY

SELECTED PAPERS OF MILTON H. ERICKSON, M.D.

edited by Jay Haley



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Foreword

For over thirty years, it has been my privilege to watch the development of the work of Dr. Milton H. Erickson, and on a few occasions to share in it in some slight measure.

One of the strange things about the study of hypnotic phenomena is that so many investigators drop out along the way. Behavioral scientists may work in this field for varying periods only to turn away to other things. This phenomenon is one of the reasons why the field of hypnotism tends repeatedly to drift into the hands of enthusiastic but unscientific amateurs, or into the hands of those who exploit it as entertainment. There must be significant reasons for this high drop-out rate. In part it may be due to the fact that here as in all psychological manipulations, a healthy balance between basic and applied research has rarely been maintained. Men have been impatient for immediate "practical" results; and in their hands the promises which hypnotism holds out have led to painful disappointments. Discouragement at this has caused some workers to turn away prematurely.

Dr. Erickson's work, as reported here, is remarkably free of this source of error. Moreover, to work in this field at all requires a special group of unusual qualities; and Dr. Erickson's ability to persist may indicate that this rare combination of human qualities is more stable in him than in many other workers. (His brief biographical disclosures suggest this vividly.) In fact, Dr. Erickson's life-long dedication to exploring the phenomenology of hypnotism is almost unique in modern medicine. Like his teacher, Dr. Clark L. Hull of Yale, Dr. Erickson has resolutely resisted all distracting influences; and there have been many. This volume is the record of Dr. Erickson's forty-odd years of patient, persistent clinical research. It goes far to rescue hypnotism from its troubled past. In addition to being a description of the work of Dr. Erickson himself, the book includes the co-ordinated efforts of several of those who from time to time have been his co-workers. What results is the most important book on clinical hypnosis that has appeared in many decades.

No one who either investigates or applies hypnosis can afford not to study this volume carefully and repeatedly. Indeed no one in the field of psychiatry and especially of psychoanalytic psychiatry should be without it. Its clinical and experimental data shed light on the organization of personality, on the ways in which the personality of an individual can shift from one nuclear focus to another, on the changing interplay among different levels of symbolic and asymbolic function, and especially on the continuous but shifting role of preconscious processing. As is true of all reports of valuable clinical and experimental work, the student learns not only when he agrees with the observer's data and interpretations, but also when he disagrees.

A few omissions have been inevitable; and a few problems have been treated too cursorily. Among these my own emphasis would be on (a) the need for a more detailed consideration of objective criteria for and comparisons of the hypnotic state itself and also of the various processes of induction; and (b) a more

complete discussion of simulation, and of the important differences between conscious (e.g. malingered) simulation, and totally unconscious (i.e. hysterical) simulation; and most important of all (but also most difficult) preconscious simulation. These issues reach deep into the roots of the unsolved problems of hypnosis. They will undoubtedly be given full consideration in possible future editions of this work.

I am tempted at this point to look forward from the past into the future. Until recently, general psychiatry, psychoanalytic psychiatry and hypnosis have had to depend for their data upon fallible reports of fallible recollections of fallible perceptions of a swift series of complicated events, in which the observers themselves are emotionally involved. This is no basis on which to build any science; and in view of this, it is miraculous that these psychological disciplines have made any progress at all. Future progress in validation and prediction, whether in hypnosis or in psychoanalytic psychiatry, will require the filming and recording which modern gadgetry now makes possible, thus opening new vistas for all psychological disciplines. Consequently, in the future study of the phenomenology of hypnosis, it will be essential to use these gadgets to record basic data and to sample them for subsequent study by many people.

In fact, if this work were being done and reported today, much of the data recorded here in carefully written protocols would have been presented in the form of samplings from transcripts of taped recordings and of videotaped screenings. Handwritten notes are valiant substitutes for such facsimile data, but not their equivalent. Even the most meticulous notes cannot avoid errors of perception, of recall, and of reporting, nor the unconscious weighting of samples. Furthermore, once the brief moment of behavior has passed, it can never be recaptured; and retrospective reconstructions of primary observations allow no opportunity to re-investigate them. This is why the day must come when all such work will be recorded directly and in some permanent and reproducible form, so as to render the primary data available for repeated study both by the investigator himself and by others as well. My hope is that as Dr. Erickson and Mr. Haley continue their work, they will assemble an entire library of videotapes of just such material as is incorporated in this book, so that many behavioral scientists from many schools of thought will have opportunities to study them repeatedly.

Yet the fact is that our understanding of hypnotism has advanced, and this is due to such work as is reported in this volume. It represents the best of the past, on which the greater precision of the future will build a new science. To this future, a major contribution will be this magnificent record of a dedicated and creative life.

LAWRENCE S. KUBIE, M.D.

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Introduction

MILTON H. ERICKSON, M.D., is generally acknowledged to be the world's leading practitioner of medical hypnosis. His writings on hypnosis are the authoritative word on techniques of inducing trance, experimental work exploring the possibilities and limits of the hypnotic experience, and investigations of the nature of the relationship between hypnotist and subject.

Perhaps less well known is the fact that Dr. Erickson has a unique approach to psychotherapy which represents a major innovation in therapeutic technique. For many years he has been developing effective and practical methods of treatment which may or may not involve the formal induction of trance. Those who think of him largely as a hypnotherapist might be surprised that he lists himself in the telephone directory as psychiatrist and family counselor. The reader who dips here and there in this volume will find that the title of an article does not always indicate what sort of extraordinary therapeutic operation is described. For example, an article called "Hypnotherapy of Two Psychosomatic Dental Problems" contains a case in which a young lady is taught to squirt water at a young man through a gap in her teeth! In "The Identification of a Secure Reality," a mother is required literally to sit for eight hours upon her troublesome son. For Dr. Erickson, these were the essential cores of two successful therapeutic procedures.

Dr. Erickson is both a psychiatrist and a psychologist, having received his medical degree and his master's degree in psychology simultaneously. Consequently he is a Fellow of both the American Psychiatric Association and the American Psychological Association. In addition, he is a Fellow of the American Psychopathological Association, and he is an honorary member of numerous societies of medical hypnosis in Europe, Latin America and Asia. He was the founding president of the American Society for Clinical Hypnosis as well as the founder and editor of that society's professional journal. His professional life since 1950 has included both a busy private practice in Phoenix, Arizona; and constant traveling to offer seminars in hypnosis and lectures both in the United States and many foreign countries.

Born in Aurum, Nevada, a town which has since disappeared, Dr. Erickson is one of the few people who traveled *east* in a covered wagon when his family settled on a farm in Wisconsin. His interest in hypnosis came about when he was an undergraduate student in psychology at the University of Wisconsin and observed a demonstration of hypnosis by Clark L. Hull. Impressed by what he had seen, Erickson invited Hull's subject up to his room and hypnotized him himself. From that time on he taught himself to be a hypnotist by using as subjects anyone who would hold still for him, including his fellow students, friends, and his family when he returned to his father's farm for summer vacation. In the Fall of the next year he took part in a seminar in hypnosis from Hull which was largely devoted to examining Erickson's experiences hypnotizing people during the summer and his experimental work in the laboratory. By his third year of college, Erickson had hypnotized several hundred people, he had carried on quite a number of experiments, and he had demonstrated hypnosis for the faculty of the medical school and the psychology department as well as the staff of Mendota State Hospital.

After receiving his medical degree at the Colorado General Hospital and completing his internship and a special period of training at the Colorado Psychopathic Hospital, Erickson accepted the position of junior psychiatrist at Rhode Island State Hospital. A few months later, in April, 1930, he joined the staff of the Research Service at the Worcester State Hospital and rapidly rose from junior to senior to Chief Psychiatrist on the Research Service. Four years later, he went to Eloise, Michigan, as Director of Psychiatric Research and Training at Wayne County General Hospital and Infirmary. In addition, he became an Associate Professor of Psychiatry at the Wayne State University College of Medicine as well as a full professor in the Graduate School there. Briefly, he was concurrently a Visiting Professor of Clinical Psychology at Michigan State University in East Lansing. He did his most extensive experimentation with hypnosis at Eloise and found ideas from hypnosis particularly useful in the training of psychiatric residents.

When training psychiatrists, as well as medical students, Dr. Erickson put great emphasis upon learning how to observe a patient, and he believes that training as a hypnotist increases that ability. His own extraordinary powers of observation are legendary. Remarking that physical limitations made him more observant, he says, "I had a polio attack when 17 years old and I lay in bed without a sense of body awareness. I couldn't even tell the position of my arms or legs in bed. So I spent hours trying to locate my hand or my foot or my toes by a sense of feeling, and I became acutely aware of what movements were. Later, when I went into medicine, I learned the nature of muscles. I used that knowledge to develop an adequate use of the muscles polio had left me and to limp with the least possible strain; this took me ten years. I also became extremely aware of physical movements and this has been exceedingly useful. People use those little telltale movements, those adjustive movements that are so revealing if one can notice them. So much of our communication is in our bodily movements, not in our speech. I've found that I can recognize a good piano player not by the noises he makes, but by the ways his fingers touch the keys. The sure touch, the delicate touch, the forceful touch that is so accurate. Proper playing involves such exquisite physical movement."

Dr. Erickson cannot recognize a good piano player by the noise he makes because he is tone deaf. This, too, he defines as an asset in his work. "So much is communicated by the way a person speaks," he says. "My tone deafness has forced me to pay attention to inflections in the voice. This means I'm less distracted by the content of what people say. Many patterns of behavior are reflected in the way a person says something rather than in what he says."

Dr. Erickson is also color blind, and this too became an asset when he experimented with producing color blindness with hypnosis. Experimenter bias was avoided. To this writer, one of the more extraordinary scenes in research is reported in "The Hypnotic Induction of Hallucinatory Color Vision Followed by Pseudo Negative After-Images." Experimental subjects in trance were shown white sheets of paper and they hallucinated colors upon them. Then they were immediately shown white sheets of paper and hallucinated the after-image, this being the complementary color. Holding up the white sheets was Dr. Erickson who could not visualize the colors whether awake or in trance. (The one color he can enjoy is purple. Although it might not always be an appropriate color, he manages to surround himself with it whenever he can. He wears purple ties and sport shirts, his pajamas are purple, and the bathroom in his house has purple walls.)

Dr. Erickson likes to describe therapy as a way of helping patients extend their limits, and he has spent his own life doing that. In 1919 when he was stricken with polio he was informed that he would never again be able to walk. After spending many hours concentrating on achieving a flicker of movement in the muscles of his legs, he was up on crutches within a year. He even managed to obtain and hold a sitting-down job in a cannery to help finance his way into the University of Wisconsin. After his first year at the university, he was advised by his physician to spend his summer vacation getting a great deal of exercise in the sunshine without using his legs. Deciding that a canoe trip would provide the appropriate exercise, Erickson set out in June in a 17-foot canoe, wearing a bathing suit, a pair of overalls, and a knotted handkerchief on his head for a hat. He did not have the strength in his legs to pull his canoe out of the water and he could swim only a few feet. His supplies for his summer's voyage consisted of a small sack of beans, another of rice, and a few cooking utensils. His wealth for the purchase of more supplies consisted of \$2.32. With these provisions, he spent from June until September traveling through the lakes of Madison, down the Yahara river, down the Rock river, into the Mississippi and on down to a few miles above St. Louis, then back up the Illinois river, through the Hennepin Canal to the Rock river, and so to Madison. He foraged for his food along the way by eating what fish he could catch, finding edible plants on the river banks when he camped at night, and harvesting crops from the Mississippi. These crops consisted of the bushels of peelings the cooks on the river steamers threw overboard. Among them, there were always a few whole potatoes or apples thrown out by mistake. By the end of the summer, he had traveled a distance of 1,200 miles with almost no supplies or money, without sufficient strength in his legs to carry his canoe over the dams which blocked his way, and so physically weak when he began that he could hardly paddle a few miles downstream without getting overtired.

The journey was even more complicated for Erickson than it would have been for anyone else. He was the kind of young man who refused to ask assistance of anyone. That is, he refused to ask directly, but he enjoyed arranging the situation so that people would "spontaneously" do things for him. In telling about his canoe trip, he said, "I would paddle within hailing distance of a fishing boat. Since I tanned very deeply and wore that knotted handkerchief on my head, the fishermen would get curious and hail me to ask a few questions. I would tell them I was a pre-med student at the University of Wisconsin canoeing for my health. They would ask how the fishing was, I would reply that the day was yet young. Invariably they gave me fish at the end of the conversation, though I never asked for any. Usually they tried to give me catfish, but I always refused them. Catfish were much too expensive and they were making their living fishing. When I refused the catfish they would give me double or three times the amount of Mississippi perch."

Although he could not carry his canoe over a dam, Dr. Erickson would never ask for assistance. He says, "I would shinny up one of the poles that are always around dams. Soon people would gather and look up curiously at me sitting up there reading a German book I brought with me in preparation for my medical studies. Finally someone would ask me what on earth I was doing up on that pole. I would look up from my book and say that I was waiting to get my canoe carried over the dam. This always meant volunteer service."

With an occasional day's work along the river, and volunteer service, Erickson completed his summer of canoeing, extending his limits by putting himself in good

physical shape. When he returned, his chest measurement had increased six inches, he could swim a mile, and he could paddle upstream against a four-mile current from dawn to dark. He could also carry his own canoe over a dam.

Years later, in 1952, Dr. Erickson suffered a rare medical occurrence when he was stricken with another strain of polio. This attack markedly affected his right arm and side. Within a year he had made one of the more difficult hikes in the mountains of Arizona with the use of two canes.

Dr. Erickson left Eloise and settled in Phoenix, largely for his health. His private practice is conducted in a unique setting. The office in which he sees patients is in his home, a small three-bedroom brick house in a pleasant neighborhood. His waiting room is the living room, and his patients have been exposed over the years to his family life and his eight children. He sees patients in an office which is just large enough to contain his desk, a few chairs, and bookcases. On the wall is a picture of his parents who lived until into their nineties, and scattered about are family mementos from over the years, including a stuffed badger. This office is almost absurdly unpretentious for a psychiatrist of Dr. Erickson's stature, but his attitude toward it is that it is convenient. A young disciple who was setting up a practice in Phoenix was seeking a proper office, and he once protested to Dr. Erickson that his office was not all that it might be. Dr. Erickson replied that it had been even less fancy when he first began practice, since the room had in it only a card table and two chairs. "However," he said, "I was there."

Besides his private practice, Dr. Erickson carries on many of his professional activities from his home, including editing *The American Journal of Clinical Hypnosis* with the assistance of his wife. Elizabeth Erickson has worked with her husband in many activities over the years and co-authored a number of papers with him. They met when she was a psychology student and laboratory assistant at Wayne State University, and were married in 1936. Dr. Erickson, who had been previously divorced, brought three children to the marriage. Since then, they have had five more children with a consequently lively family life. Mrs. Erickson once estimated that they would have at least one teen-ager in the family for 30 consecutive years. The last two are now in their teens, and the earlier children are married and bringing home grandchildren.

Dr. Erickson uses examples from his life with his children when discussing hypnosis and therapy. Readers who might wonder what it is like to have a father who is a master hypnotist could enjoy the article "Pediatric Hypnotherapy" in this volume. Dr. Erickson describes handling an incident with his son Robert to illustrate how to deal with children in pain. Robert fell down the back stairs, split his lip, and knocked his upper tooth back into the maxilla. He was bleeding and screaming with pain and fright. His parents rushed to him and saw that it was an emergency. Dr. Erickson writes,

"No effort was made to pick him up. Instead, as he paused for breath for fresh screaming, he was told quickly, simply, sympathetically and emphatically, 'That hurts awful, Robert. That hurts terrible.'

"Right then, without any doubt, my son knew that I knew what I was talking about. He could agree with me and he knew I was agreeing with him completely. Therefore he could listen respectfully to me, because I had demonstrated that I understood the situation fully."

Rather than reassure the boy, Dr. Erickson proceeded in typical fashion:

"Then I told Robert, 'And it will keep right on hurting.' In this simple statement, I named his own fear, confirmed his own judgment of the situation, demonstrated my good intelligent grasp of the entire matter and my entire agreement with him, since right then he could foresee a lifetime of anguish and pain for himself.

"The next step for him and for me was to declare, as he took another breath, 'And you really wish it would stop hurting.' Again, we were in full agreement and he was ratified and even encouraged in this wish. And it was *his* wish, deriving entirely from within him and constituting his own urgent need.

"With the situation so defined, I could then offer a suggestion with some certainty of its acceptance. This suggestion was, 'Maybe it will stop hurting in a little while, in just a minute or two.'

"This was a suggestion in full accord with his own needs and wishes and, because it was qualified by 'maybe it will,' it was not in contradiction to his own understandings of the situation. Thus he could accept the idea and initiate his response to it."

Dr. Erickson then shifted to another important matter. As he puts it:

"Robert knew that he hurt, that he was a damaged person; he could see his blood upon the pavement, taste it in his mouth and see it on his hands. And yet, like all other human beings, he too could desire narcissistic distinction in his misfortune, along with the desire even more for narcissistic comfort. Nobody wants a picayune headache; since a headache must be endured, let it be so colossal that only the sufferer could endure it. Human pride is so curiously good and comforting! Therefore, Robert's attention was doubly directed to two vital issues of comprehensible importance to him by the simple statements, 'That's an awful lot of blood on the pavement. Is it good, red, strong blood? Look carefully, Mother, and see. I think it is, but I want you to be sure.'"

Examination proved it to be good strong blood, but it was necessary to verify this by examination of it against the white background of the bathroom sink. In this way the boy, who had ceased crying in pain and fright, was cleaned up. When he went to the doctor for stitches the question was whether he would get as many as his sister had once been given. The suturing was done without anesthetic on a boy who was an interested participant in the procedure.

Although Dr. Erickson has a local practice, many of the patients who come to see him have traveled considerable distances. Patients will fly from as far as New York or from Mexico City to be relieved of their troubles almost as if visiting a surgeon, and others commute irregularly from the West Coast. In recent years both his practice and his teaching have been curtailed because of illness. When he attends an occasional meeting now it is in a wheelchair, and his work load at home is reduced.

Many of the admirers of Dr. Erickson have felt that his approach to therapy and hypnosis have not been adequately presented to the psychiatric community. Although he is well known and a figure of some controversy, his basic writings have not been easily available. He has published over 100 papers on a variety of subjects over the years, but the reader of an occasional article or the student at a lecture cannot properly appreciate the magnitude of this man's work or the innovations he has introduced. In response to the need to make his work more easily available, a young psychiatrist, Bernard E. Gorton, took on the task of making a complete collection of his papers in 1957. Dr. Gorton felt that the nature of Dr. Erickson's work was not sufficiently evident in his papers and decided to supplement them with tape-recorded lectures as well as introductory material explaining his operations in experimental and clinical work. In 1958, Dr. Gorton held a meet-

ing in Philadelphia with Dr. Erickson, Dr. André M. Weizenhoffer and myself to discuss how the work might best be presented. He asked me to write prefatory material for the clinical section and he asked Dr. Weizenhoffer to bring his experience and scholarship to the experimental work and provide commentary. The meeting included discussions with Dr. Erickson of many of the more subtle aspects of his techniques. To Dr. Gorton, the problem was how to present these procedures to an audience which might not appreciate or understand them in the psychiatric climate of that time.

In 1959, Dr. Gorton died suddenly, leaving us all with a personal loss and the work unfinished. Dr. André Weizenhoffer took on the task and set as his goal a complete edition of Dr. Erickson's works with introductory material and commentary on each section and the addition of recorded lectures. This considerable enterprise never reached final fruition, although Dr. Weizenhoffer devoted a great deal of time and dedicated labor to the attempt to make this work available.

In 1966 I was asked to complete, arrange and provide final editing on the collection of Dr. Erickson's papers, and I decided upon a quite different approach. I felt the immediate goal should be to get the major papers out in book form as rapidly as possible. With the current changes in psychiatry, there seemed less need to explain Dr. Erickson than had been planned in the previous projects and since he has recently written a number of papers on his procedures there was less need to provide recorded lectures. The problem was one of selecting papers, doing minor editing, and providing an appendix with some commentary.

Since I have had the benefit of the judgment, and in some places retained the editing, of the previous editors, this volume can be considered a result of long labor by a number of people. The work of Dr. Gorton and Dr. Weizenhoffer on many of the early papers has simplified my labor. I have accepted some of their changes and rejected others. In general, there has been only minor editing of these papers and some cuts of tabular data; where cuts were made there is a reference to the original publication.

Since this volume could not be a complete collected works, there has been the problem of selection. Many of the major papers on trance induction, experimentation and clinical technique were relatively easy to choose. Other papers could not be included and Erickson admirers might feel they should be here. This selection consists of what I thought should be presented at this time and Dr. Erickson has approved it. A complete bibliography of his works is also presented so that the reader who wishes to explore his other writings can do so.

The arrangement of the papers in this volume has been done in a quite simple way. There are three sections: a section on trance induction, one on experimentation, and one on techniques of therapy. Within each section, the papers are largely arranged in order of year of publication. With this arrangement, the reader can examine the papers selectively or read through a particular section and observe the development of Dr. Erickson's ideas in that area over the years.

JAY HALEY

SECTION I

Techniques of Trance Induction

Deep Hypnosis and Its Induction*

GENERAL CONSIDERATIONS

A PRIMARY PROBLEM in all hypnotic work is the induction of satisfactory trance states. Especially is this true in any work based upon deep hypnosis. Even the problem of inducing light trance states and maintaining them at a constant level is often a difficult task. The securing of comparable degrees of hypnosis in different subjects and similar trance states in the same subject at different times frequently constitutes a major problem.

The reasons for these difficulties derive from the fact that hypnosis depends upon inter- and intrapersonal relationships. Such relationships are inconstant and alter in accord with personality reactions to each hypnotic development. Additionally, each individual personality is unique and its patterns of spontaneous and responsive behavior necessarily vary in relation to time, situation, purposes served, and the personalities involved.

Statistically, certain averages may be obtained for hypnotic behavior but such averages do not represent the performance of any one subject. Hence, they cannot be used to appraise either individual performances or specific hypnotic phenomena. To judge trance depths and hypnotic responses, consideration must be given not only to average responses but to the various deviations from the average that may be manifested by the individual. For example, catalepsy is a fairly standard form of hypnotic behavior appearing usually in the light trance and persisting in the deep trance states. However, extensive experience will disclose that some subjects may never spontaneously develop catalepsy as a single phenomenon either in the light or deep trance. Others may manifest it only in the lighter stages of hypnosis, some only in the profound trances, and some only in the transition from the light to the deeper levels of hypnosis. Even more confusing are those subjects who manifest it only in relation to other types of hypnotic behavior, such as amnesia. However good an indicator of trance states catalepsy may be on the average, its presence or absence for any one subject must be interpreted entirely in terms of that subject's total hypnotic behavior.

Efforts have been made to solve some of these difficulties by developing special techniques for the induction and regulation of hypnotic trances sometimes with little regard for the nature of hypnotic behavior. One of the most absurd of these endeavors, illustrative of a frequent tendency to disregard hypnosis as a phenomenon in favor of an induction technique as a rigidly controllable process apart from

**Experimental Hypnosis*. Leslie M. LeCron (editor). New York, Macmillan, 1952, pp. 70-114.

the subject's behavior, was the making of phonograph records. This was done on the assumption that identical suggestions would induce identical hypnotic responses in different subjects and at different times. There was a complete oversight of the individuality of subjects, their varying capacities to learn and to respond, and their differing attitudes, frames of reference, and purposes for engaging in hypnotic work. There was oversight of the importance of *interpersonal relationships* and of the fact that these are both contingent and dependent upon the *intrapsychic* or *intrapersonal relationships* of the subject.

Even in so established a field as pharmacology, a standardized dose of a drug is actually an approximation so far as the individual's physiological response is concerned. When thought is given to the difficulty of "standardizing" such intangibles as inter- and intrapersonal relationships, the futility of a rigid hypnotic technique "to secure controlled results" is apparent. An awareness of the variability of human behavior and the need to meet it should be the basis of all hypnotic techniques.

In the problem of developing general techniques for the induction of trances and the eliciting of hypnotic behavior, there have been numerous uncritical utilizations of traditional misconceptions of hypnotic procedure. The "eagle eye," the "crystal ball," strokings and passes, and similar aids as sources of mysterious force have been discarded by the scientifically trained. Yet the literature abounds with reports of hypnotic techniques based upon the use of apparatus intended to limit and restrict the subject's behavior, to produce fatigue and similar reactions, as if they were the essential desiderata of hypnosis: Crystal balls held at a certain distance from the eyes, revolving mirrors, metronomes, and flashing lights are often employed as the major consideration. As a result, too much emphasis is placed upon external factors and the subject's responses to them. Primarily, emphasis should be placed upon the intrapsychic behavior of the subject rather than upon the relationship to externalities. At best, apparatus is only an incidental aid, to be discarded at the earliest possible moment in favor of the utilization of the subject's behavior which may be initiated but not developed by the apparatus. However much staring at a crystal ball may be conducive to fatigue and sleep, neither of these results are an essential part of the hypnotic trance. To illustrate: A number of subjects were systematically trained by a competent hypnotist to develop a trance by staring fixedly at a crystal ball held at a distance of six inches and slightly above the subjects' eye level. As a result of this conditioning, efforts to hypnotize them without a crystal ball were difficult and, in some instances, ineffectual. Personal experimentation with these subjects disclosed that having them simply imagine that they were looking at a crystal ball resulted in more rapid trance induction and profounder trance states. Repetition of this procedure by colleagues and students yielded similar results. Return to the actual crystal gazing resulted in the original slower and less profound trances characterized by greater dependence upon external factors.

Numerous experiments by the author and his colleagues in which experienced subjects watched silent pendulums or listened to soft music or to metronomes disclosed that imaginary aids were much more effective than actual apparatus. The same findings were obtained with naive subjects. Medical students were divided into two groups: one stared at a crystal ball and the other merely tried to visualize a crystal ball. The latter group achieved more rapid and better results. The experiment was repeated by having the second group listen to a metronome while the first group was instructed to depend upon auditory imagery of a metronome. Again, the

imaginary aid proved the more effective. Numerous variations yielded similar results. The utilization of imagery rather than actual apparatus permits the subject to utilize his actual capabilities without being hampered by an adjustment to non-essential externalities. This has been found true with experienced subjects as well as naive subjects, and in the whole range of imagery from visual to kinesthetic.

The utilization of imagery in trance induction almost always facilitates the development of similar or related more complex hypnotic behavior. For example, the subject who experiences much difficulty in developing hallucinations often learns to develop them when a trance is induced by utilization of imagery.

Subjective accounts from many subjects explaining these findings may be summarized as follows: "When I listen to the imaginary metronome, it speeds up or slows down, gets louder or fainter, as I start to go into a trance, and I just drift along. With the real metronome, it remains distractingly constant, and it keeps pulling me back to reality instead of letting me drift along into a trance. The imaginary metronome is changeable and always fits in with just the way I'm thinking and feeling, but I have to fit myself to the real one."

In this same connection, mention should be made of findings in experimental and clinical work centering around hypnotically induced visual hallucinations. For example, a patient, greatly confused about her personal identity, was induced to visualize a number of crystal balls in which she could hallucinate a whole series of significant life experiences, make objective and subjective comparisons and thus establish the continuity of her life, from one hallucinated experience to the next. With a real crystal ball, the hallucinated experiences were physically limited in extent, and the changing and superimposition of "scenes" much less satisfactory.

Another important general consideration in trance induction concerns the appreciation of time as a factor in itself. Traditionally, the mystic force of a single glance from the eagle eye is sufficient to induce hypnosis. This misconception has not really been discredited since statements can be found in current literature to the effect that 2-5 minutes' time is sufficient to induce the profound neuro- and psychophysiological changes of hypnosis. When administering a powerful drug, these same writers would wait a reasonable time for its effects. The expectation of practically instantaneous results from the spoken word indicates an uncritical approach which militates against scientifically valid results. Unfortunately, much published work has been based upon an unrecognized belief in the immediate omnipotence of hypnotic suggestions and a failure to appreciate that responsive behavior in the hypnotic subject, as in the unhypnotized person, depends upon a time factor. The hypnotic subject is often expected, in a few moments, to reorient himself completely psychologically and physiologically, and to perform complex tasks ordinarily impossible in the nonhypnotic state.

Subjects vary in respect to time requirements, and their time requirements vary greatly from one type of behavior to another, and also in relation to their immediate frame of reference. Some subjects who can develop visual hallucinations promptly may require a relatively prolonged time to develop auditory hallucinations. The presence of a certain mood may facilitate or hinder hypnotic responses. Incidental considerations may interfere with the development of hypnotic phenomena ordinarily possible for the subject. The fact that the author is a psychiatrist has more than once militated against a subject's readily developing auditory hallucinations.

Certain subjects can develop profound trances in a brief period of time and are capable of readily manifesting exceedingly complex hypnotic phenomena. However, critical study of such subjects frequently discloses a high incidence of "as if" behavior. Such a subject instructed, for example, to develop negative hallucinations for observers present will behave *as if* those persons were absent, accomplishing this primarily by avoidance reactions and inhibition of responses. If such behavior is accepted as valid and as the most that can be expected, the subject is likely to remain arrested at that level of functioning. If such subjects are given adequate time to reorganize their neuro- and psychophysiological processes, negative hallucinations can be developed which will withstand searching test procedures.

The ease with which a deep trance can be induced in a subject is too often uncritically accepted as a valid criterion of subsequent trance performances. Experience with many such subjects discloses a frequent tendency to return to a lighter trance state when given complicated hypnotic tasks. Such subjects for various reasons are thereby endeavoring to ensure adequate functioning by enlisting the aid of conscious mental processes. Hence, unreliable and contradictory experimental findings are frequently obtained when apparently the experimental procedure was fully controlled.

Neither should the ease rapidity of trance induction be mistaken as a valid indication of the ability to maintain a trance state. Easy hypnotizability may indicate a need to allow adequate time for a reorientation of the subject's total behavior to permit full and sustained responses. To believe that the subject who readily develops a deep trance will remain deeply hypnotized indefinitely is a naive assumption.

There are those subjects who hypnotize easily, develop a great variety of complex hypnotic behavior, and yet fail to learn some minor hypnotic adjustment. To illustrate, an excellent subject capable of amazingly complex hypnotic behavior was found to have extreme difficulty in relation to physical orientation. All experimental studies with him had to be done in a laboratory setting; otherwise, his functioning tended to be at an "as if" level. However, a hallucinatory laboratory situation was as satisfactory to him as a genuine laboratory. Another capable subject, easily hypnotized, could not develop dissociation and depersonalization states unless she were first induced to hallucinate herself elsewhere, preferably at home reading a book. Once this was done, inconsistencies in her dissociative behavior disappeared. With both subjects, effort to economize on time in establishing the laboratory or home situation, despite their rapid hypnotizability, resulted in faulty hypnotic responses. The general situation, even as time considerations, may be an essential factor in the development and maintenance of satisfactory trances.

The oversight and actual neglect of time as an important factor in hypnosis and the disregard of the individual needs of subjects account for much contradiction in hypnotic studies. Published estimates of the hypnotizability of the general population range from 5-70 percent and even higher. The lower estimates are often due to a disregard of time as an important factor in the development of hypnotic behavior. Personal experience extending over 35 years with well over 3,500 hypnotic subjects has been most convincing of the importance of subject individuality and time values. One of the author's most capable subjects required less than 30 seconds to develop his first profound trance, with subsequent equally rapid and consistently

reliable hypnotic behavior. A second remarkably competent subject required 300 hours of systematic labor before a trance was even induced; thereafter, a 20-30-minute period of trance induction was requisite to secure valid hypnotic behavior.

Ordinarily, a total of 4-8 hours of initial induction training is sufficient. Then—since trance induction is one process and trance utilization is another to permit the subject to reorganize behavioral processes in accord with projected hypnotic work time must necessarily be allotted with full regard for the subject's capacities to learn and to respond. For example, muscular rigidity is usually produced in a few moments, but a satisfactory anesthesia or analgesia for childbirth may take hours' in divided training periods.

The length of time the subject has been engaged in hypnotic work and the variety of his hypnotic experience is important in hypnotic research. Often, subjects are transients, serving in only one or two experimental studies. Personal experience, as well as that of colleagues, has demonstrated that the more extensive and varied a subject's hypnotic experience is, the more effectively he can function in complicated problems. The author prefers to do research with subjects who have experienced hypnosis repeatedly over a long period of time and who have been called upon to manifest a great variety of hypnotic phenomena. Lacking this, the subjects are systematically trained in different types of hypnotic behavior. In training a subject for hypnotic anesthesia for obstetrical purposes, she may be taught automatic writing and negative visual hallucinations as a preliminary foundation. The former is taught as a foundation for local dissociation of a body part and the latter as a means of instruction in not responding to stimuli. Such training might seem irrelevant, but experience has disclosed that it can be a highly effective procedure in securing the full utilization of the subject's capabilities. The goal sought is often infinitely more important than the apparent logic of the procedure, and the mere testing of a hypnotic procedure should not be regarded as a testing of the possibility of hypnotic phenomena.

The foregoing has been presented as general background. Now, more specific discussion will be offered concerning the nature of deep trances and their induction, but not with any view of trying to describe a specific technical procedure. The variability of subjects, the individuality of their general and immediate needs, their differences in time and situation requirements, the uniqueness of their personalities and capabilities, together with the demands made by the projected work, render impossible any absolutely rigid procedure. At best, a rigid procedure can be employed to determine its effectiveness in securing certain results; as such, it is a measure of itself primarily and not of the inherent nature of the results obtained. Even more apparent is this when it is recognized that trance induction for experiments is acutally a preliminary to trance utilization, which belongs to another category of behavior. Such utilization depends not upon the procedure employed to secure a trance, but upon the behavior developments that arise subsequent to the induction and from the trance state itself. No matter how "controlled" a trance induction may be, the development of hypnotic phenomena, and of psychological reactions to those phenomena, introduce variables for which no rigid procedure of induction can provide controls. As an analogy: however dependent upon a controlled anesthesia a surgical operation may be, the actual surgery and surgical results belong to another category of events merely facilitated by the anesthesia.

DESCRIPTION OF DEEP HYPNOSIS

BEFORE OFFERING A DISCUSSION of deep-trance induction, an effort will be made to describe deep hypnosis itself. It must be recognized that a description, no matter how accurate and complete, will not substitute for actual experience, nor can it be made applicable for all subjects. Any description of a deep trance must necessarily vary in minor details from one subject to another. There can be no absolute listing of hypnotic phenomena as belonging to any one level of hypnosis. Some subjects will develop phenomena in the light trance usually associated with the deep trance, and others in a deep trance will show some of the behavior commonly regarded as characteristic of the light trance. Some subjects who in light trances show behavior usually typical of the deep trance may show a loss of that same behavior when deep hypnosis actually develops. For example, subjects who easily develop amnesias in the light trance may just as easily fail to develop amnesia in the deep trance. The reason for such apparent anomalies lies in the entirely different psychological orientation of the deeply hypnotized person as contrasted to his orientation in lighter stages of hypnosis. At the lighter levels, there is an admixture of conscious understandings and expectations and a certain amount of conscious participation. In the deeper stages, functioning is more properly at an unconscious level of awareness.

In the deep trance, the subject behaves in accordance with unconscious patterns of awareness and response which frequently differ from his conscious patterns. Especially is this so in naive subjects whose lack of experience with hypnosis and whose actual ignorance of hypnotic phenomena unwittingly interfere with the development of deep-trance phenomena until experience permits a diffusion of understandings from the conscious to the unconscious mind.

An example frequently encountered is the difficulty of teaching good naive subjects to talk in the profound trance. In the light trance, they can speak more or less readily; but in the deep trance, where their unconscious mind is functioning directly, they find themselves unable to talk without awakening. They have had a lifetime of experience in which talking is done at a conscious level, and have no realization that talking is possible at a purely unconscious level of awareness. Subjects often need to be taught to realize their capabilities to function adequately whether at a conscious or an unconscious level of awareness. It is for this reason that the author has so often emphasized the need of spending 4-8 or more hours in inducing trances and training subjects to function adequately, before attempting hypnotic experimentation or therapy.

Contradictory or unsatisfactory results in experimental work requiring deep hypnosis in which verbalization by the subject is necessary have resulted from the subject's need to return to a lighter stage of hypnosis in order to vocalize, without the experimenter's realizing this. Yet teaching the subject how to remain in a deep trance and to talk and function as adequately as at a conscious level of awareness is relatively easy. The subject who seems unable to learn to talk while in the deep trance can be taught automatic writing, to read silently that writing, and to mouth silently as he reads; it is a relatively simple step to convert the motor activity of writing and mouthing into actual speaking. A little practice and, contrary to the subject's past experiential understandings, speech becomes possible at the unconscious level of functioning. The situation is similar in relation to other types of

hypnotic phenomena: Pain is a conscious experience, hence analgesia or anesthesia often need to be taught in a like fashion. The same may be true for hallucinations, regression, amnesia, or other hypnotic phenomena. Some subjects require extensive instruction in a number of regards; others can themselves transfer learnings in one field to a problem of another sort.

The above is an introduction to a description of the nature of a deep trance: *Deep hypnosis is that level of hypnosis that permits the subject to function adequately and directly at an unconscious level of awareness without interference by the conscious mind.*

The subject in a deep trance functions in accord with unconscious understandings, independently of the forces to which his conscious mind ordinarily responds; he behaves in accordance with the reality which exists in the given hypnotic situation for his unconscious mind. Conceptions, memories, and ideas constitute his reality world while he is in the deep trance. The actual external environmental reality with which he is surrounded is relevant only insofar as it is utilized in the hypnotic situation. Hence, external reality does not necessarily constitute concrete objective matter possessed of intrinsic values. A subject can write automatically on paper and read what he has written. He can hallucinate equally well the paper, pencil and motor behavior of writing and then read that "writing." The intrinsic significance of the concrete pencil and paper derives solely from the subjective experiential processes within the subject; once used, they cease to be a part of his total hypnotic situation. In light trances or in the waking state, pencil and paper are objects possessed of significances in addition to those significances peculiar to the individual mind.

The reality of the deep trance must necessarily be in accord with the fundamental needs and structure of the total personality. Thus it is that the profoundly neurotic person in the deep trance can, in that situation, be freed from his otherwise overwhelming neurotic behavior, and thereby a foundation laid for his therapeutic reeducation in accord with the fundamental personality. The overlay of neuroticism, however extensive, does not distort the central core of the personality, though it may disguise and cripple the manifestations of it. Similarly, any attempt to force upon the hypnotic subject, however deep the trance, suggestions unacceptable to his total personality leads either to a rejection of the suggestions or to a transformation of them so that they can then be satisfied by pretense behavior (so often accepted as valid in attempted studies of hypnotically induced antisocial behavior). The need to appreciate the subject as a person possessing individuality which must be respected cannot be overemphasized. Such appreciation and respect constitute a foundation for recognizing and differentiating conscious and unconscious behavior. Only an awareness of what constitutes behavior deriving from the unconscious mind of the subject enables the hypnotist to induce and to maintain deep trances.

For convenience of conceptualization only, deep trances may be classified as (a) somnambulistic, and (b) stuporous. In the well-trained subject, the former is that type of trance in which the subject is seemingly awake and functioning adequately, freely, and well in the total hypnotic situation, in a manner similar to that of a nonhypnotized person operating at the waking level. A well-trained subject is not meant one laboriously taught to behave in a certain way, but rather a subject trained to rely completely upon his own unconscious patterns of response and behavior.

An illustrative example is the instance in which the author, as a teaching device for the audience, had a subject in a profound somnambulistic trance conduct a lecture and demonstration of hypnosis, (unaided by the author) before a group of psychiatrists and psychologists. Although many in the audience had had experience with hypnosis, none detected that she was in a trance. A similar instance concerns a psychiatrist, a student and subject of the author's, who, without the author's previous knowledge and as a personal experiment in autohypnosis, conducted a staff meeting and presented a case history successfully without her trance state being detected. However, once apprised of the situation, the audience could readily recognize the tremendous differences between ordinary conscious behavior and trance behavior, and repetitions of this procedure were detected.

The stuporous trance is characterized primarily by passive responsive behavior, marked by both psychological and physiological retardation. Spontaneous behavior and initiative, so characteristic of the somnambulistic state if allowed to develop, are lacking. There is likely to be a marked perseveration of incomplete responsive behavior, and there is a definite loss of ability to appreciate the self. Medical colleagues asked by the author to examine subjects in a stuporous trance without knowledge of the hypnotic situation have repeatedly offered the tentative opinion of a narcotized state. In the author's experience, the stuporous trance is difficult to obtain in many subjects, apparently because of their objection to losing their awareness of themselves as persons. Its use by the author has been limited primarily to the study of physiological behavior and to its therapeutic application in certain types of profoundly neurotic patients.

PROBLEMS OF DEEP-TRANCE INDUCTION

AN EXPOSITION OF THE NUMEROUS PROBLEMS of deep-trance induction will be presented by means of a discussion of the major considerations involved, with a detailing of procedures that may be used and the purposes to be served. Although the author is presenting his own experience, this has been confirmed by the experience and practice of his students and colleagues. These considerations will be listed and discussed separately.

Trance Induction versus Trance Utilization

Foremost among the major considerations in any work with deep hypnosis is the need to recognize that trance induction is one thing, and trance utilization is another (even as surgical preparation and anesthesia are one thing, and the surgery is another). This has been mentioned before and is repeated here for emphasis. Unless the projected work is no more than a study of trance induction itself, this differentiation must be made by both the subject and the hypnotist. Otherwise, there can be a continuance of trance-induction behavior into the trance state with the result that "trance" activities become an admixture of partial and incomplete induction responses, elements of conscious behavior, and actual trance behavior.

Differentiation of Trance Behavior from Ordinary Conscious Behavior

Directly related to the first consideration is the recognition and differentiation of conscious behavior from the behavior arising from the unconscious. In this matter, experience is the only teacher, and careful study of behavior manifestations is necessary. This is best accomplished in relation to reality objects. The sub-

ject in profound hypnosis can be instructed to note well and thoroughly an actual chair. Secret removal of that chair does not necessarily interfere with his task. He can continue to hallucinate it in its original position, and sometimes to see it at the same time in a new position as a duplicate chair. Each image is then possessed of the same reality values to him. In the ordinary conscious state, such behavior would be impossible or a pretense. Or if the subject discovers that the chair has been moved, searching study may disclose other mental adjustments. Thus, he may develop a different orientation of the subject so that, to him, the chair remains unmoved in the northeast corner, his sense of direction having altered to meet the situational need.

Similarly, the induced hallucination of a person, resulting in two visual images, confronts the subject with the question of which visual image is real. The spontaneous solution, witnessed by the author on several occasions achieved especially by psychology and medical students, may be one in which the subject silently wishes that a certain movement would be made by the two figures. The figure responding to that silent wish is then recognized as hallucinatory. The reality to the self of the subject's hypnotic behavior and its recognition by the hypnotist is essential to induce and to permit adequate functioning in the trance state. Failure of such recognition permits the acceptance of inadequate responses as valid manifestations, whereas prolonged and intensive effort may be required to produce the desired hypnotic phenomena.

Orientation of all Hypnotic Procedure About the Subject

All techniques of procedure should be oriented about the subject and his needs in order to secure his full cooperation. The projected hypnotic work should be no more than a part of the total hypnotic situation, and it should be adapted to the subject, not the subject to the work. These needs may range from the important to insignificant; but in the hypnotic situation, an apparently inconsequential matter may become crucial.

For example, a subject repeatedly used with equivocal and unsatisfactory results by another hypnotist in an experiment involving the use of a plethysmograph on one hand cooperated with good results when the author recognized his unconscious need to have his left-handedness recognized by placing the plethysmograph on his left rather than his right hand. This done, it was found that he could then also cooperate when his right hand was used. An ambidextrous subject, in an experiment involving automatic writing and drawing, was found to insist unconsciously upon the privilege of using either hand at will. Other subjects, especially medical and psychology students, have often insisted at unconscious level upon the satisfaction of mere whims or the performance of other hypnotic work before their full cooperation could be secured for the experimental project for which they had volunteered.

A patient with a circumscribed neurotic disability was both unable and unwilling to pay for therapy. Yet he did not want to receive treatment without first making payment. Accordingly, he was induced to act as a volunteer subject for a long series of experiments and, at his insistence, no therapy was attempted. After more than a year of experimental work, he unconsciously reached the conclusion that his volunteered hypnotic services constituted adequate payment for therapy, which he then accepted fully.

A subject's psychological needs, no matter how trivial and irrelevant, need to be

met as fully as possible in hypnosis where inter- and intrapersonal relationships are so vital. Oversight or neglect of this consideration will often lead to unsatisfactory equivocal, and even contradictory results. Indeed, when contradictory results are obtained from a subject, the entire hypnotic situation must be reviewed from this point of view.

The Need to Protect the Subject

A subject needs to be protected at all times as a personality possessed of rights, privileges, and privacies and recognized as being placed in a seemingly vulnerable position in the hypnotic situation.

Regardless of how well informed and intelligent a subject may be, there always exists, whether recognized or not, a general questioning uncertainty about what will happen or what may or may not be said or done. Even subjects who have unburdened themselves freely and without inhibition to the author as a psychiatrist have manifested this need to protect the self and to put the best foot forward no matter how freely the wrong foot has been exposed.

This protection should properly be given the subject in both the waking and the trance states. It is best given in an indirect way in the waking state and more directly in the trance state.

To illustrate, a 20-year-old girl volunteered as an experimental subject but always reported for work in the company of a tactless sharp-tongued associate who constituted a serious obstacle to hypnotic work. After a considerable amount of work, the subject began reporting alone. Some time later, she explained with mixed amusement and embarrassment, "I used to bring Ruth with me because she is so awfully catty that I knew I wouldn't do or say anything I didn't want to." She then told of her desire for therapy for some concealed phobic reactions. Her experimental work both before and after therapy was excellent.

In working with new subjects, and always when planning to induce deep trances, a systematic effort is made to demonstrate to the subjects that they are in a fully protected situation. Measures to this end are relatively simple and seemingly absurdly inadequate. Nevertheless, personality reactions make them effective. For example, a psychology graduate volunteered as a demonstration subject for a seminar group. A light trance was induced with some difficulty, and her behavior suggested her need for assurance of protection. Under the pretext of teaching her automatic writing, she was instructed to write some interesting sentence and, having written it, not to show it until after automatic writing as a topic had been discussed. Hesitantly, she wrote briefly. She was told to turn the paper face down so that not even she could read it. Handed a new sheet of paper, she was asked to write automatically her conscious and unconscious answers to the question, "Are you willing to have me read what you wrote?" Both written replies were "yes," to which was automatically added, "anybody."

The suggestion was offered that there was no urgency about reading her sentence since it was her first effort at automatic writing, that it might be more interesting to fold it up and put it away in her purse and at some later time compare the script with further automatic writing she might do. Following this, a deep trance was easily induced.

Some time later she explained, "I really wanted to go into a trance but I didn't know if I could trust you, which was silly because everything was being done in

front of the whole class. When you asked me to write, my hand just impulsively wrote, 'Do I love Jerry?' and then I wrote that you or anybody else could read it. But when you just told me to put it away and later just examine it for the handwriting, without even hinting about a possible meaning of the writing, I knew then that I had no reason whatever for any hesitation. And I also knew that I could answer my own question later instead of doing it all at once and wondering if I was right."

Such behavior has been encountered many times, and this general method of handling the need for ego protection has been found remarkably effective in securing deep, unconscious cooperation in inducing deep trances.

Another measure frequently employed in this same connection is that of instructing the subject in a light trance to dream a very vivid, pleasing dream, to enjoy it, and, upon its completion, to forget it and not to recall it until so desired at some later date in a suitable situation. Such instruction is manifold in its effects: It gives the subject a sense of liberty which is entirely safe and yet can be in accord with any unconscious ideas of license and freedom in hypnosis. It utilizes familiar experiences in forgetting and repression. It gives a sense of security and confidence in the self, and it also constitutes a post-hypnotic suggestion to be executed only at the subject's desire. A broad foundation is thus laid conducive to the development of profound trances.

This type of comprehensive suggestion is employed extensively by the author since it serves to initiate a wealth of hypnotic responses pleasing to the subject and constructive for the hypnotist, in a fashion fully protective of the subject and thereby insuring cooperation.

Another measure of a somewhat negative character is that of instructing the lightly hypnotized subject to withhold some item of information from the hypnotist. This item should, preferably, be one of a definitely personal character not fully recognized by the subject as such. It might be his middle name, what member of his family he resembles most, or the first name of his best girl friend when he was a little boy. Thus, the subject discovers by actual experience that he is not a helpless automaton, that he can actually enjoy cooperating with the hypnotist, that he can succeed in executing hypnotic suggestions, and that it is his behavior rather than the hypnotist's that leads to success. All of these reactions are essential in securing deep trances. Also, the subject learns unwittingly that, if he can act successfully upon a *negative* suggestion, the converse is true.

Another frequently overlooked form of protection for the subject is the expression of appreciation for his services. Full regard must be given to the human need to succeed and to the desire for recognition by the self and others of that success. Depriving the subject of this constitutes a failure to protect him as a sentient being. Such failure may imperil the validity of hypnotic work since the subject may feel that his efforts are not appreciated, and this may result in lesser degrees of cooperation. Even more can this be recognized when it is realized that emotional reactions are not necessarily rational, especially so at an unconscious level of reaction. Experience has shown that appreciation must be definitely expressed in some manner, preferably first in the trance state and later in the ordinary waking state. In projects where expressed appreciation is precluded, the subject can receive in other situations the hypnotist's appreciation of services rendered. In any hypnotic work, careful attention must be given to the full protection of the subject's ego by meeting readily his needs as an individual.

The Utilization of All of the Subject's Responsive and Spontaneous Behavior During Trance Induction

Often, techniques of hypnosis center primarily about what the hypnotist does or says to secure trances, with too little attention directed to what the subject is doing and experiencing. Actually, the development of a trance state is an intrapsychic phenomenon, dependent upon internal processes, and the activity of the hypnotist serves only to create a favorable situation. As an analogy, an incubator supplies a favorable environment for the hatching of eggs, but the actual hatching derives from the development of life processes within the egg.

In trance induction, the inexperienced hypnotist often tries to direct or bend the subject's behavior to fit his conception of how the subject "should" behave. There should be a constant minimization of the role of the hypnotist and a constant enlargement of the subject's role. An example may be cited of a volunteer subject, used later to teach hypnosis to medical students. After a general discussion of hypnosis, she expressed a willingness to go into a trance immediately. The suggestion was offered that she select the chair and position she felt would be most comfortable. When she had settled herself to her satisfaction, she remarked that she would like to smoke a cigarette. She was immediately given one, and she proceeded to smoke lazily, meditatively watching the smoke drifting upward. Casual conversational remarks were offered about the pleasure of smoking, of watching the curling smoke, the feeling of ease in lifting the cigarette to her mouth, the inner sense of satisfaction of becoming entirely absorbed just in smoking comfortably and without need to attend to any external things. Shortly, casual remarks were made about inhaling and exhaling, these words timed to fit in with her actual breathing. Others were made about the ease with which she could almost automatically lift her cigarette to her mouth and then lower her hand to the arm of the chair. These remarks were also timed to coincide with her actual behavior. Soon, the words "inhale," "exhale," "lift," and "lower" acquired a conditioning value of which she was unaware because of the seemingly conversational character of the suggestions. Similarly, casual suggestions were offered in which the words sleep, sleepy, and sleeping were timed to her eyelid behavior.

Before she had finished the cigarette, she had developed a light trance. Then the suggestion was made that she might continue to enjoy smoking as she slept more and more soundly; that the cigarette would be looked after by the hypnotist while she absorbed herself more and more completely in deep sleep; that, as she slept, she would continue to experience the satisfying feelings and sensations of smoking. A satisfactory profound trance resulted and she was given extensive training to teach her to respond in accord with her own unconscious pattern of behavior.

Thereafter, she was presented on a number of occasions to groups of medical students as a volunteer subject with whom they might work. Her behavior with them was essentially the same as with the author. However, her request to smoke a cigarette was variously handled by the students. Some tactfully dissuaded her from thus postponing the trance induction, some joined her in smoking, and some patiently waited for her to finish. Only after the cigarette question was disposed of in some manner was she allowed to settle down to the task of being hypnotized. The result in every instance was a failure. At a final session with all of the students who had participated, two other students were brought in separately to attempt to hypnotize her. Both of these had been given independently the above account of

the author's utilization of the subject's behavior. Both induced profound trances. Then the other students, following the examples set them, also succeeded.

This case has been cited in some detail since it illustrates so clearly the importance of the hypnotist adapting whatever technique he may be employing to the behavioral activities of the subject. To interpret that subject's desire to smoke as an active resistance to trance induction would be incorrect; rather, it was an expression of an actual willingness to cooperate in a way fitting to her needs. It needed to be utilized as such rather than to be overcome or abolished as resistance.

Many times, the apparent active resistance encountered in subjects is no more than an unconscious measure of testing the hypnotist's willingness to meet them halfway instead of trying to force them to act entirely in accord with his ideas. Thus, one subject, who had been worked with unsuccessfully by several hypnotists, volunteered to act as a demonstration subject. When her offer was accepted, she seated herself in a stiffly upright, challenging position on the chair facing the audience. This apparently unpropitious behavior was met by a casual conversational remark to the audience that hypnosis was not necessarily dependent upon complete relaxation or automatism, but that hypnosis could be induced in a willing subject if the hypnotist was willing himself to accept the subject's behavior fully. The subject responded to this by rising and asking if she could be hypnotized standing up. Her inquiry was countered by the suggestion, "Why not demonstrate that it can be?" A series of suggestions resulted in the rapid development of a deep trance. Inquiries by the audience revealed that she had read extensively on hypnosis and objected strenuously to the frequently encountered misconception of the hypnotized person as a passively responsive automaton, incapable of self-expression. She explained further that it should be made clear that spontaneous behavior was fully as feasible as responsive activity and that utilization of hypnosis could be made effectively by recognition of this fact.

It should be noted that the reply, "Why not demonstrate that it can be?" constituted an absolute acceptance of her behavior, committed her fully to the experience of being hypnotized, and ensured her full cooperation in achieving her own purposes as well as those of the hypnotist.

Throughout the demonstration, she frequently offered suggestions to the author about what next he might ask her to demonstrate, sometimes actually altering the suggested task. At other times, she was completely passive in her responses.

Another subject, a graduate in psychology, experienced great difficulty in going into a deep trance. After several hours of intensive effort, she timidly inquired if she could advise on technique, even though she had no other experience with hypnosis. Her offer was gladly accepted, whereupon she gave counsel: "You're talking too fast on that point; you should say that very slowly and emphatically and keep repeating it. Say that very rapidly and wait awhile and then repeat it slowly; and please, pause now and then to let me rest, and please don't split your infinitives."

With her aid, a profound, almost stuporous trance was secured in less than 30 minutes. Thereafter, she was employed extensively in a great variety of experimental work and was used to teach others how to induce deep trances.

Acceptance of such help is an expression neither of ignorance nor of incompetence; rather, it is an honest recognition that deep hypnosis is a joint endeavor in which the subject does the work and the hypnotist tries to stimulate the subject to make the necessary effort. It is an acknowledgment that no person can really

understand the individual patterns of learning and response of another. While this measure works best with highly intelligent, seriously interested subjects, it is also effective with others. It establishes a feeling of trust, confidence, and active participation in a joint task. Moreover, it serves to dispel misconceptions of the mystical powers of the hypnotist and to define indirectly the respective roles of the subject and the hypnotist.

Fortunately, this experience occurred early in the author's work and has been found of immense value ever since in inducing hypnosis of every degree and in the eliciting of highly complex hypnotic behavior.

One often reads in the literature about subject resistance and the techniques employed to circumvent or overcome it. In the author's experience, the most satisfactory procedure is that of accepting and utilizing the resistance as well as any other type of behavior, since properly used, they can all favor the development of hypnosis. This can be done by wording suggestions in such a fashion that a positive or a negative response or an absence of response are all defined responsive behavior. For example, a resistive subject who is not receptive to suggestions for hand levitation can be told, "Shortly your right hand, or it may be your left hand, will begin to lift up, or it may press down, or it may not move at all, but we will wait to see just what happens. Maybe the thumb will be first, or you may feel something happening in your little finger, but the really important thing is not whether your hand lifts up or presses down or just remains still; rather, it is your ability to sense fully whatever feelings may develop in your hand."

With such wording, absence of motion, lifting up, and pressing down are all covered, and any of the possibilities constitutes responsive behavior. Thus, a situation is created in which the subject can express his resistance in a constructive, cooperative fashion; manifestation of resistance by a subject is best utilized by developing a situation in which resistance serves a purpose. Hypnosis cannot be resisted if there is no hypnosis attempted. The hypnotist, recognizing this, should so develop the situation that any opportunity to manifest resistance becomes contingent upon hypnotic responses with a localization of all resistance upon irrelevant possibilities. The subject whose resistance is manifested by failure to hand levitation can be given suggestions that his right hand will levitate, his left hand will not. To resist successfully, contrary behavior must be manifested. The result is that the subject finds himself responding to suggestion, but to his own satisfaction. In the scores of instances where this measure has been employed, less than a half dozen subjects realized that a situation had been created in which their ambivalence had been resolved. One writer on hypnosis naively employed a similar procedure in which he asked subjects to resist going into a trance in an effort to demonstrate that they could not resist hypnotic suggestion. The subjects cooperatively and willingly proved that they could readily accept suggestions to prove that they could not. The study was published in entire innocence of its actual meaning.

Whatever the behavior offered by the subject, it should be accepted and utilized to develop further responsive behavior. Any attempt to "correct" or alter the subject's behavior, or to force him to do things he is not interested in, militates against trance induction and certainly against deep trances. The very fact that a subject volunteers to be hypnotized and then offers resistance indicates an ambivalence which, recognized, can be utilized to serve successfully the purposes of both the subject and the hypnotist. Such recognition and concession to the needs of the

subject and the utilization of his behavior do not constitute, as some authors have declared, an "unorthodox technique" based upon "clinical intuition;" instead, they constitute a simple recognition of existing conditions, based upon full respect for the subject as a functioning personality.

The Basing of Each Progressive Step of Trance Induction upon Actual Accomplishments by the Subject

These accomplishments may be those of the hypnotic situation, or they may belong to the subject's everyday experience. Merely volunteering to act as a subject may be the outcome of a severe inner struggle. Relaxing comfortably in a chair and disregarding external distractions is an accomplishment. Absence of response to hand-levitation suggestions is not necessarily a failure, since the very immobility of the hands is, in itself, an accomplishment. Willingness to sit quietly while the hypnotist laboriously offers numerous suggestions, apparently futilely, is still another accomplishment. Each of these constitutes a form of behavior that may be emphasized as an initial successful step toward a greater development in the trance state.

To illustrate, a Ph.D. in psychology, extremely scornful and skeptical of hypnosis, challenged the author to "try to work your little fad" on her in the presence of witnesses who would be able to attest to the author's failure. However, she did state that if it could be demonstrated to her that there were such a phenomenon as hypnosis, she would lend herself to any studies the author might plan. Her challenge and conditions were accepted. Her promise to act as a subject, if convinced, was carefully and quietly emphasized since it constituted behavior of her own and could become the foundation for future trance behavior. Next, a technique of suggestion was employed which was believed certain to fail, which it did. Thus, the subject was given a feeling of success, gratifying to her, but carrying an admixture of some regret over the author's discomfiture. This regret constituted a foundation stone for future trances. Then apparently as a face saving device for the author, the topic of ideomotor activity was raised. After some discussion, indirect suggestion led her to express a willingness to cooperate in experimentation of ideomotor activity. She qualified this by stating, "Don't try to tell me that ideomotor activity is hypnosis, because I know it isn't." This was countered by the observation that ideomotor activity could undoubtedly be achieved in hypnosis even as in the waking state. Thus, another foundation stone was laid for future trance activity.

Hand levitation was selected as a good example of ideomotor activity and she acceded readily, since she was unacquainted with the author's frequent use of hand levitation as an initial trance-induction procedure.

In the guise of a pedantic discussion, a series of hand-levitation suggestions was offered. She responded quickly and delightedly. This was followed by the suggestion that, as a preliminary to experimental work, it might be well if she absorbed herself completely in the subjective aspects of the experience, disregarding, as she did so, all external stimuli except the author's remarks. Thus, a further stone was laid. Within 10 minutes, she developed a profound somnambulistic trance. After some minutes of further suggestion of variations in her ideomotor responses, the remark was made that she might like to discontinue and to return to another point in the original discussion. Thus, she was given a suggestion to awaken from the trance, safe from any autocritical understandings. She agreed and wakened

easily, and the author immediately resumed the original discussion. Shortly, a second trance was induced by the same procedure, followed in the course of four hours by four more.

During the third trance, she was tested for catalepsy, which was present. This alarmed and distressed her, but before she could awaken, it was described to her satisfaction as "arrested ideomotor activity," and this not only reassured her but stimulated further interest.

In the next two trances, she willingly undertook to experience "other associated phenomena of ideomotor activity." Thus, she was instructed to glance at the witnesses and then to note that, as her attention to the others waned and she became more absorbed subjectively in the ideomotor behavior of her hands, she would cease to see the others. In this way, she was taught to develop negative hallucinations by extending her interest in ideomotor activity to an exclusion of other behavior. By a comparable measure, she was taught positive hallucinations by visualizing her levitated hand so clearly in two different positions that she would not be able to distinguish her hand from its visual image in another position. This done, the specious argument was offered that, as her attention to her ideomotor activity waxed and waned, she would variously see and not see, hear and not hear, the others present, that she might visualize in duplicate others present, and that she could forget the presence of others and even ideas about them or any other thing. By this means, she was induced to experience a wealth of hypnotic phenomena.

There followed the more difficult task of informing her that she had been hypnotized. This was done by suggesting, in the sixth trance, that she recall her feelings "during the first demonstration of ideomotor activity." As she did so, it was pointed out that her self-absorption might possibly be compared to a somewhat similar state that was manifested in hypnosis. Proceeding to the "second demonstration," the suggestion was offered that her behavior was almost trancelike. She was then asked to visualize herself as she must have appeared in the "third demonstration." As she did so, she was asked to comment on her cataleptic behavior, to develop auditory imagery of what had been said to her, and to note the responses made. This time, hypnosis was hinted at as a definite probability, and she was tactfully praised for her ability to develop the imagery, visual and auditory, that enabled her to view so clearly her behavior. Immediately, she was asked to consider the fourth instance. As she did so, she asked hesitantly if, in that demonstration, she were not really in a trance. Assured that she could understand freely, comfortably, and with a most pleasing sense of actual accomplishment, she declared, "Then I must really be in a trance right now." The author agreed and rapidly reminded her of every success she had achieved and how excellently she had been able to utilize her ideomotor activity to expand her field of personal experience. She was further instructed to review mentally the entire evening and to give the author any counsel she wished.

After quiet meditation she asked the author not to tell her, after she had awakened, that she had been hypnotized, but to give her time to reorganize her general attitudes toward hypnosis and toward the author as an exponent of hypnosis, and time to get used to the error of her previous thinking.

It was agreed, and she was told she would awaken with an amnesia for her trance experience and with a pleased feeling that both she and the author were interested in ideomotor phenomena. Suggestion was then given that her unconscious mind

would take much pleasure in keeping awareness away from her consciousness of the fact that she had been hypnotized, and that this secret could be shared by her unconscious with the author. She was instructed that her unconscious could and would so govern her conscious mind that she could learn about hypnosis and her hypnotic experience in any way that was satisfying and informative to her as a total personality. By this post-hypnotic suggestion, the subject was given still further hypnotic training in relation to the independent functioning of the unconscious and conscious mind, the development of a hypnotic amnesia, and the execution of post-hypnotic work. In addition, she was made aware at a deep level that she, as a personality, was fully protected, that her functioning rather than the hypnotist's was the primary consideration in trance induction, and that utilization of one process of behavior could be made a stepping-stone to development of a similar but more complex form.

The outcome was most interesting. Two days later, the subject offered her apologies for her "flippant skepticism" about hypnosis and her "unwarranted" disparagement of the author's work. She added that she was much amused by her need to apologize. A few days later, she volunteered to act as a subject, stating she was now seriously interested and would like to participate in some investigative studies. She proved to be a most productive subject over a period of years.

This lengthy example illustrates many of the considerations this author has found of tremendous importance in inducing deep trances. The little item of having a "secret understanding" between the subject's unconscious mind and the hypnotist has many times proved to be remarkably effective as a means of securing deep trances in otherwise aggressively resistant subjects. By virtue of this, they could make conscious and express freely and safely their resistances. At the same time, they could have a profound feeling that they were cooperating fully, securely, and effectively. The satisfaction so derived by the subject leads to a desire for continued successful accomplishment, and active resistances are rapidly dispelled, resolved, or constructively utilized.

In brief, whatever the behavior manifested by the subject, it should be accepted and regarded as grist for the mill. Acceptance of her need for the author to fail led to ideomotor activity. This led progressively to a wealth of hypnotic phenomena based either directly or indirectly upon ideomotor responses and culminated in a success pleasing to her as well as to the hypnotist. Had any effort been made to get that subject to conform to some rigid technique of trance induction, failure would have undoubtedly ensued, and rightly so, since the development of a trance was not to prove the author's ability but to secure experiential values and understandings by the subject.

Much of the foregoing material constitutes an exposition of the major considerations involved in the securing of deep trances. Some special hypnotic procedures which are usually successful will now be summarized. Full details are omitted due to space limitations and because of the constant shifting from one orientation to another which they require.

THE CONFUSION TECHNIQUE

FOR WANT OF A BETTER TERM, one of these special procedures may be termed the "confusion technique." It has been employed extensively for the induction

of specific phenomena as well as deep trances. Usually, it is best employed with highly intelligent subjects interested in the hypnotic process, or with those consciously unwilling to go into a trance despite an unconscious willingness.

In essence, it is no more than a presentation of a whole series of individually differing, contradictory suggestions, apparently all at variance with each other, differently directed, and requiring a constant shift in orientation by the subject. For example, in producing hand levitation, emphatic suggestions directed to the levitation of the right hand are offered together with suggestions of the immobility of the left hand. Shortly, the subject becomes aware that the hypnotist is apparently misspeaking, since levitation of the left hand and immobility of the right are then suggested. As the subject accommodates himself to the seeming confusion of the hypnotist, thereby unwittingly cooperating in a significant fashion, suggestions of immobility of both hands are given together with others of the simultaneous lifting of one and pressing down of the other. These are followed by a return to the initial suggestions.

As the subject tries, conditioned by his early cooperative response to the hypnotist's apparent misspeaking, to accommodate himself to the welter of confused, contradictory responses apparently sought, he finds himself at such a loss that he welcomes any positive suggestion that will permit a retreat from so unsatisfying and confusing a situation. The rapidity, insistence, and confidence with which the suggestions are given serve to prevent the subject from making any effort to bring about a semblance of order. At best, he can only try to accommodate himself and, thus, yield to the overall significance of the total series of suggestions.

Or, while successfully inducing levitation, one may systematically build up a state of confusion as to which hand is moving, which more rapidly or more laterally, which will become arrested in movement, and which will continue and in what direction, until a retreat from the confusion by a complete acceptance of the suggestions of the moment becomes a greatly desired goal.

In inducing an extensive amnesia with a regression of the subject to earlier patterns of behavior, the "confusion technique" has been found extremely valuable and effective. It is based upon the utilization of everyday experiences familiar to everyone. To regress a subject to an earlier time in his life, a beginning is made with casual conversational suggestions about how easy it is sometimes to become confused as to the day of the week, to misremember an appointment as of tomorrow instead of yesterday, and to give the date as the old year instead of the new. As the subject correlates these suggestions with his actual past experiences, the remark is made that, although today is Tuesday, one might think of it as Thursday, but, since today is Wednesday and, since it is not important for the present situation whether it is Wednesday or Monday, one can call to mind vividly an experience of one week ago on Monday, that constituted a repetition of an experience of the previous Wednesday. This, in turn, is reminiscent of an event which occurred on the subject's birthday in 1948, at which time he could only speculate upon but not know about what would happen on the 1949 birthday and, even less so, about the events of the 1950 birthday, since they had not yet occurred. Further, since they had not occurred, there could be no memory of them in his thinking in 1948.

As the subject receives these suggestions, he can recognize that they carry a weight of meaningfulness. However, in order to grasp it, his tendency is to try to think in terms of his birthday of 1948, but to do so he has to disregard 1949 and

1950. Barely has he begun to so orient his thinking when he is presented with another series of suggestions to the effect that one may remember some things and forget others, that often one forgets things he is certain he will remember but which he does not, that certain childhood memories stand out even more vividly than memories of 1947, '46, '45, that actually every day he is forgetting something of this year as well as last year or of 1945 or '44, and even more so of '42, '41, and '40. As for 1935, only certain things are remembered identifiably as of that year and yet, as time goes on, still more will be forgotten.

These suggestions are also recognized as carrying a weight of acceptable meaningfulness, and every effort the subject makes to understand it leads to acceptance of them. In addition, suggestions of amnesia have been offered, emphasis has been placed upon the remembering of childhood memories, and the processes of re-orientation to an earlier age level are initiated.

These suggestions are given not in the form of commands or instructions but as thought-provoking comments, at first. Then, as the subject begins to respond, a slow, progressive shift is made to direct suggestions to recall more and more vividly the experiences of 1935 or 1930. As this is done, suggestions to forget the experiences subsequent to the selected age are given directly, but slowly, unnoticeably, and these suggestions are soon reworded to "forget many things, as naturally as one does, many things, events of the past, speculations about the future, but of course, forgotten things are of no importance—only those things belonging to the present—thoughts, feelings, events, only these are vivid and meaningful." Thus, a beginning order of ideas is suggested, needed by the subject but requiring a certain type of response.

Next, suggestions are offered emphatically, with increasing intensity, that certain events of 1930 will be remembered so vividly that the subjects finds himself in the middle of the development of a life experience, one not yet completed. For example, one subject reoriented to his sixth birthday responded by experiencing himself sitting at the table anxiously waiting to see if his mother would give him one or two frankfurters. The Ph.D. previously mentioned was reoriented to an earlier childhood level and responded by experiencing herself sitting in the schoolroom awaiting a lesson assignment.

It is at this point that an incredible error is made by many serious workers in hypnosis. This lies in the unthinking assumption that the subject, reoriented to a period previous to the meeting with the hypnotist, can engage in conversation with the hypnotist, literally a nonexistent person. Yet, critical appreciation of this permits the hypnotist to accept seriously and not as a mere pretense a necessary transformation of his identity. The Ph.D., reliving her school experience, would not meet the author until more than 15 years later. So she spontaneously transformed his identity into that of her teacher, and her description as she perceived him in that situation, later checked, was found to be a valid description of the real teacher. For Dr. Erickson to talk to her in the schoolroom would be a ridiculous anachronism which would falsify the entire reorientation. With him seen as Miss Brown and responded to in the manner appropriate to the time, the schoolroom, and to Miss Brown, the situation became valid, a revivification of the past.

Perhaps the most absurd example of uncriticalness in this regard is the example of the psychiatrist who reported at length upon his experimental regression of a subject to the intrauterine stage, at which he secured a subjective account of intra-

uterine experiences. He disregarded the fact that the infant *in utero* neither speaks nor understands the spoken word. He did not realize that his findings were the outcome of a subject's compliant effort to please an uncritical, unthinking worker.

This need for the hypnotist to fit into the regression situation is imperative for valid results, and it can easily be accomplished. A patient under therapy was regressed to the age level of four years. Information obtained independently about the patient revealed that, at that time in her life, she had been entertained by a neighbor's gold hunting-case watch, a fact she had long forgotten. In regressing her, as she approached the four-year level, the author's gold hunting-case watch was gently introduced visually and without suggestion. His recognition as that neighbor was readily and spontaneously achieved.

This transformation of the hypnotist into another person is not peculiar only to regression work. Many times, in inducing a deep trance in a newly met subject, the author has encountered difficulty until he recognized that, as Dr. Erickson, he was only a meaningless stranger and that the full development of a deep trance was contingent upon accepting a transformation of his identity into that of another person. Thus, a subject wishing for hypnotic anesthesia for childbirth consistently identified the author as a former psychology professor; it was not until shortly before delivery that he was accorded his true identity. Failure to accept seriously the situation would have militated greatly against the development of a deep trance and the training for anesthesia.

Regardless of a hypnotist's experience and ability, a paramount consideration in inducing deep trances and securing valid responses is a recognition of the subject as a personality, the meeting of his needs, and an awareness and a recognition of his patterns of unconscious functioning. The hypnotist, not the subject, should be made to fit himself into the hypnotic situation.

THE REHEARSAL TECHNIQUE

ANOTHER TYPE OF DEEP-TRANCE INDUCTION may be termed the rehearsal or repetition technique. This can and often should be used for deep hypnosis and for individual phenomena. It can be employed in a variety of ways both experimentally and in therapeutic work, especially the latter. It consists of seizing upon some one form of behavior that apparently gives a promise of good development and having the subject rehearse it and then repeat it in actuality.

Thus, a subject who makes little response to hypnosis but who seems to be potentially a good subject may make abortive responses to suggestions of automatic writing. This partial tentative response can be seized upon as an instance of actual success. Then, a series of suggestions is given leading the subject to rehearse mentally what must have been done to achieve that particular success. Then he is asked to rehearse mentally how it could be done on plain paper, on ruled paper, with a pen, a pencil, or a crayon. Next, he is asked to perform what has been rehearsed mentally in the various permutations possible with that equipment. This can be followed by further rehearsals and repetitions, introducing as new variables hallucinatory paper and writing instruments, and new letters, words, and sentences. As this procedure is followed, the subject progressively develops a deeper and deeper trance especially if the rehearsal and repetition are applied to other forms of hypnotic behavior.

Sometimes this technique can be applied in an entirely different fashion. For example, before a class of senior medical students, the author undertook to produce amnesia in a volunteer subject who wished both to go into a trance and to disappoint the author. The student expressed the opinion that he doubted if he could develop amnesia, and declared that he himself would propose his own proof of amnesia, namely the removal of his right shoe. Should this occur, he explained, it would constitute proof to him that he had developed an amnesia.

He developed a fairly good trance, and a whole series of instructions was given him, emphatically and repetitiously, that he perform several acts such as borrowing one student's cigarettes, another's glasses, etc. Repetitious command was also given to forget each simple task. Slipped unobtrusively into these suggestions was the statement that, after awakening, while discussing with the class the presence or absence of an amnesia for the assigned tasks, he would cross the room, write a sentence on the blackboard, and sign his name, still continuing his discussion.

Upon awakening, he declared that he recollects everything said to him and that he had done. His statement was challenged whereupon he heatedly gave a running account of the tasks and his performance of them. Without interrupting his argument, he wrote the sentence and signed his name. After he had returned to his seat, his attention was called to the writing which he disclaimed, emphasizing that his narration proved his remembrance, and he extended his right foot with the shoe on to prove conclusively that he had no amnesia. He then continued his remarks, absent-mindedly removing his shoe as he did so. This he did not discover until the class was dismissed. Systematically appraising the situation, he recognized that he had developed an amnesia with no conscious knowledge of the fact. The class was reconvened, and he was asked to duplicate the writing. As he was doing this, a few suggestions elicited a profound trance, and an extensive demonstration of the psychopathology of everyday life was conducted.

Thus, the subject had been given a long, repetitious list of simple performances, apparently to lead to amnesia but actually to permit him to succeed over and over in accord with his personal needs. Hence, the failures were really successful performances which could actually favor another successful performance, namely the development of amnesia. The unobtrusive slipping in of the suggestion of writing permitted him to set it apart from the other more urgent suggestions. Then, as he achieved his numerous successes of no amnesia, the pattern of response was completed for more successes by his proving the lack of amnesia, by exhibiting his shoe on his foot. This however, left unsatisfied his actual desire for still more success, namely his demonstration of an amnesia by the removal of his shoe, an item of behavior he himself had selected. This he achieved by a double amnesia for the writing and the shoe removal, an even greater success than he had anticipated. Then, as he repeated the writing, he found himself again in the situation that had led to his most satisfying accomplishment. The situation led easily to a deep trance state by virtue of a repetition or rehearsal procedure.

Still another form of this technique has been found useful in inducing deep trances and in studies of motivation, association of ideas, regression, symbol analysis, repression, and the development of insight. It has proved a most effective therapeutic procedure.

This technique is primarily a matter of having the subject repeat over and over in the trance state a dream, or, less preferably, a fantasy, in constantly differing guises.

That is, he repeats a spontaneous dream or an induced dream with a different cast of characters, perhaps in a different setting, but with the same meaning. After the second dreaming, the same instructions are given again, and this continues until the purposes to be served are accomplished. To illustrate, a patient offered this spontaneous dream of the previous night: "I was alone in a grass-covered meadow. There were knolls and curving rises in the ground. It was warm and comfortable. I wanted something dreadfully—I don't know what. But I was scared—paralyzed with fear. It was horrible. I woke up trembling."

Repeating, the dream was: "I was walking up a narrow valley. I was looking for something I had to find, but I didn't want it. I didn't know what I was looking for, but I knew something was forcing me, to look for it and I was afraid of it, whatever it was. Then I came to the end of the valley where the walls came together and there was a little stream of water flowing from under a thick bush. That bush was covered with horrible thorns. It was poisonous. Something was pushing me closer and I kept getting smaller and smaller and I still feel scared."

The next repetition was: "This seems to have something to do with part of the last dream. It was spring and the logs were in the river and all the lumberjacks and all the men were there. Everybody owned one of the logs, me too. All the others had big hardwood logs, but mine, when I got it, was a little rotten stick. I hoped nobody noticed and I claimed another, but when I got it, it was just like the first."

Again repeated: "I was in a rowboat fishing. Everybody was fishing. Each of the others caught a great big fish. I fished and fished and all I got was a little sickly fish. I didn't want it, but I had to keep it. I felt horribly depressed."

Again: "I went fishing again. There were lots of big fish shooting around in the water, but I caught only miserable little fish that would fall off the hook and float dead on the water. But I had to have a fish so I kept on fishing and got one that seemed to have a little life in it. So I put it in a gunny sack because I knew everybody should put his fish in a gunny sack. Everybody else did, and their fish always filled their gunny sacks completely. But my fish was just lost in the gunny sack, and then I noticed my gunny sack was all rotten and there was a hole in it, and a lot of slime and filth gushed out and my fish floated away in that horrible slime, belly up, dead. And I looked around and I was on that meadow I told you about and the gunny sack was under that bush with all those thorns and my good-for-nothing fish was floating down that stream of water I told you about, and it looked just like a rotten stick of wood."

A series of further repetitions finally resulted in the breaking down of extensive amnesias and blockings and his disclosure that, at puberty, under circumstances of extreme poverty, he had acted as a nurse for his mother, who had rejected him completely since infancy and who had died of an extensive neglected cancer of the genitals. Additionally, he told for the first time of his profound feelings of inferiority deriving from his lack of phallic development, his strong homosexual inclinations, and his feeling that his only protection from homosexuality would be a yielding to the "horrible pressure and force society uses to shove you to heterosexuality."

This instance from a case history illustrates unconscious processes clearly: each succeeding dream resulted in a more easily induced and more easily maintained trance, at the same time giving the patient greater freedom in his thinking and in his use of less and less abstruse symbolism.

A necessary caution in utilizing this type of procedure for experimental or dem-

onstration hypnosis is that dreams of a pleasant character should be employed if possible. If not, the implantation of an artificial complex, thereby limiting the extent of unpleasant emotions, is desirable. In all instances, care should be taken to discontinue the work should it tend to lead to a situation which the hypnotist is not competent to handle. Otherwise, acute emotional disturbances and active repressions may result in a loss of the subject's good regard for the hypnotist and causing emotional distress to the subject.

Another variation of the rehearsal method is that of having the subject visualize himself carrying out some hypnotic task and then adding to the visualization other forms of imagery such as auditory, kinesthetic, etc. For example, a patient under therapy for neurotic maladjustment had great difficulty in developing and maintaining a deep trance. By having her, as an induction procedure, mentally rehearse the probable general course of events for each exploratory or therapeutic session and then to hallucinate as fully as possible the probable experiences for each occasion, it was possible to elicit and maintain satisfactorily deep trances. By giving her "previews," she was able to develop and maintain a profound trance. After exploration of the underlying causes of her problem, the next step in therapy was to outline in great detail, with her help, the exact course of activity that she would have to follow to free herself from past rigidly established habitual patterns of behavior. Then she was reoriented to a time actually three months in the future and thereby was enabled to offer a "reminiscent" account of her therapy and recovery. A wealth of details was given, affording an abundance of new material which could be incorporated into the final therapeutic procedure.

A comparable instance is that of a girl who was a most competent subject except before an audience. Then, it was impossible to induce a deep trance or to maintain one induced in private. By having her rehearse a fantasied public demonstration for the future and then reorienting her to a date several weeks further in the future, she was able to regard the fantasy as an actual successful accomplishment of the past, much to her satisfaction. Immediately, she was asked to "repeat" her demonstration before a student group, which she willingly and successfully did. There was no recurrence of the difficulty even after she was given a full understanding of how she had been manipulated.

Subjects reoriented from the present to the actual future, instructed to look back upon proposed hypnotic work as actually accomplished, can often, by their "reminiscence," provide the hypnotist with understandings that can readily lead to much sounder work in deep trances. In therapy, as well as experimentally, the author has found this measure highly effective since it permits elaboration of hypnotic work in fuller accord with the subject's total personality and unconscious needs and capabilities. It often permits the correction of errors and oversights before they can be made, and it furnishes a better understanding of how to develop suitable techniques. A subject employed in this manner can often render invaluable service in mapping out procedures and techniques to be employed in experimentation and therapy.

MULTIPLE-DISSOCIATION TECHNIQUE

ANOTHER MEASURE is frequently employed by the author in inducing deep trances, maintaining them, or utilizing them for extensive complex work. It is the induction of multiple visual hallucinations, in which different but related

things are visualized. (Many subjects can be taught "crystal gazing" in the light trance.) One patient, in a profoundly depressed, discouraged mood, readily seized the opportunity to intensify by contrast her unhappy mood by accepting the suggestion that she see in action in a crystal ball a happy incident of her childhood consciously forgotten. Utilizing her masochistic response to this, a second crystal ball was suggested in which she could see, simultaneously with the first, an incident belonging to another age level. Soon there was a total of a dozen hallucinatory crystals in each of which a life scene of a different age level was being portrayed by hallucinatory figures belonging to her experiential past. Thus, a combined experimental investigative and therapeutic situation was created in which her limited immediate willingness for a brief trance served to carry her into an extensive development hours long that served therapeutically her total personality needs.

This procedure is not limited to induced hallucinatory behavior. A musician, unresponsive to direct hypnotic suggestion, was induced to recall the experience of having his "thoughts haunted by a strain of music." This led to a suggested search for other similar experiences. Soon, he became so absorbed in trying to recall forgotten memories and beating time as a kinesthetic aid that a deep trance developed. In other words, dissociation phenomena, whether spontaneous or induced, can be used in a repetitious manner to establish a psychological momentum to which the subject easily and readily yields.

POST-HYPNOTIC TECHNIQUES

IN A PAPER WITH E. M. ERICKSON, attention was directed to the spontaneous hypnotic trance developed in relation to the execution of post-hypnotic tasks. In inducing hypnosis, light or deep, the hypnotist may introduce unobtrusively some form of post-hypnotic suggestion that will permit the subsequent development of a spontaneous trance. This trance can then be utilized as a point of departure for developing a new trance state. Not all subjects respond to this procedure, but it often proves of immense value.

Sometimes a subject who is only in a light trance can be given a simple post-hypnotic suggestion. As he develops a spontaneous trance in executing the post-hypnotic act, suggestions may be given to deepen it. The procedure can be repeated, and a third trance, still deeper, can result, until sufficient repetitions bring a deep hypnosis.

Concerning unobtrusive post-hypnotic suggestions, the author resorts to such measures as saying, "Each time I take hold of your wrist and move your arm gently in this way (demonstrating), it will be a signal to you to do something—perhaps to move your other hand, perhaps to nod your head, perhaps to sleep more soundly, but each time you receive the signal, you will become ready to carry out the task." Repeated several times in the first trance, the subject, in his immediate thinking, applies the suggestion only to that trance session. However, weeks later, in an appropriate setting, the repetition of the signal may result in a rapid induction of hypnosis. This method has been used extensively as a time-saving procedure in teaching professional students to become both hypnotists and hypnotic subjects.

As to post-hypnotic acts for the subject to execute, some simple casual

activity is much better than some attention-compelling overt act: watching the hypnotist light a cigarette, noting whether the match tossed toward the waste-basket falls in, or observing that the book on the desk is about two inches away from the edge, are all infinitely better than having the subject clap his hands when the word "pencil" is spoken. The more casually hypnotic work can be done, the easier it is for the subject to adapt to it. Casualness permits ready utilization of the behavioral developments of the total hypnotic situation.

In presenting this material, the intention has not been to outline specific or exact techniques of procedure for hypnosis; rather, it has been to demonstrate that hypnosis should primarily be the outcome of a situation in which interpersonal and intrapersonal relationships are developed constructively to serve the purpose of both the hypnotist and the subject. This cannot be done by following rigid procedures and fixed methods nor by striving to reach a single specific goal. The complexity of human behavior and its underlying motivations makes necessary a cognizance of the multitude of factors existing in any situation arising between two personalities engaged in a joint activity. Whatever the part played by the hypnotist may be, the role of the subject involves the greater amount of active functioning—functioning which derives from the capabilities, learning, and experiential history of the total personality. The hypnotist can only guide, direct, supervise, and provide the opportunity for the subject to do the productive work. To accomplish this, he must understand the situation and its needs, protect the subject fully and be able to recognize the work accomplished. He must accept and utilize the behavior that develops, and be able to create opportunities and situations favorable for adequate functioning of the subject.

Further Techniques of Hypnosis—Utilization Techniques*

IN THE MORE COMMON TECHNIQUES of hypnotic trance induction, the procedure is based primarily upon altering the subject's activity of the moment and instructing him variously in a different form of behavior. Thus, the subject may be told to sit quietly and comfortably in a chair, fixate his gaze, relax his body progressively and develop ideo sensory imagery of various types until a trance state develops. Similarly, in the hand-levitation technique, a participatory attitude, an interest in the experiential aspects of the situation, and the development of ideo-motor activity may all be suggested as a measure of inducing a trance.

Such techniques as these require of the subject a willing acceptance of, and cooperation with, an externally suggested or imposed form of behavior which may be either active or passive. Resistance to or rejection of this imposed behavior may require that the operator resort to another more readily accepted or more pleasing technique. Or it may be met by fatiguing the subject into acquiescence through the operator's persistence, and sometimes it requires a postponement of the effort at hypnosis. Ordinarily, one or another of these measures meets adequately the particular resistance problem presented by the individual patient. But there is always a risk that a change of technique, undue prolongation of effort or postponement of the trance will have an adverse effect upon the patient's acceptance of hypnosis as a personally possible experience.

There are patients who prove unresponsive and resistant to the usual induction techniques, who are actually readily amenable to hypnosis. They are encountered more frequently in psychotherapeutic practice but are also seen in general medical and dental practice and judged too often to be unsuited to the use of hypnosis. These patients are those who are unwilling to accept any suggested behavior until after their own resistant, contradictory or opposing behavior has first been met by the operator. By reason of their physical condition, anxiety, intense interest, concern or absorption in their own behavior, they are unable to cooperate actively or passively to permit an effective alteration of it. For these patients, what may be termed *Techniques of Utilization* frequently serve to meet most adequately their special needs. These same techniques serve to facilitate in both rapidity and ease the process of trance induction in the average patient. They are, in essence, no more than a simple reversal of the usual procedure of inducing hypnosis. Ordinarily, trance induction is based upon securing from the patient some form of initial acceptance and cooperation with the operator. In *Techniques of Utilization*, the usual procedure is reversed: There is an initial acceptance of, and a ready cooperation with, the patient's presenting behavior by the operator, however seemingly adverse it may appear to be in the clinical situation.

These various *Techniques of Utilization* will be clarified and illustrated by the following clinical examples:

Example 1. This patient entered the office in a most energetic fashion and declared at once that he did not know if he was hypnotizable. He was willing to go

*Amer. J. Clin. Hyp., 2, 1959, 3-21.

into a trance if it were at all possible, provided the writer would approach the entire matter in an intellectual fashion rather than in a mystical, ritualistic manner. He declared that he needed psychotherapy for a variety of reasons and that he had tried various schools of psychotherapy extensively without benefit. Hypnosis had been attempted on various occasions and had failed miserably because of "mysticism" and "a lack of appreciation for the intellectual approach."

Inquiry elicited that he felt an "intelligent" approach signified, not a suggestion of ideas, but questioning him concerning his own thinking and feeling in relation to reality. The writer, he declared, should recognize that he was sitting in a chair, that the chair was in front of a desk, and that these constituted absolute facts of reality. As such, they could not be overlooked, forgotten, denied or ignored. In further illustration, he pointed out that he was obviously tense, anxious and concerned about the tension tremors of his hands which were resting on the arms of the chair, and that he was also highly distractable, noticing everything about him.

The writer immediately seized upon this last comment as the basis for the initial co-operation with him. He was told, "Please proceed with an account of your ideas and understanding, permitting me only enough interruptions to insure that I understand fully and that I follow along with you. For example, you mentioned the chair but obviously you have seen my desk and have been distracted by the objects on it. Please explain fully.

He responded verbosely with a wealth of more or less connected comments about everything in sight. At every slight pause, the writer interjected a word or phrase to direct his attention anew. These interruptions, made with increasing frequency, were as follows: "And that paperweight; the filing cabinet; your foot on the rug; the ceiling light; the draperies; your right hand on the arm of the chair; the pictures on the wall; the changing focus of your eyes as you glance about; the interest of the book titles; the tension in your shoulders; the feeling of the chair; the disturbing noises and thoughts; weight of hands and feet; weight of problems, weight of desk; the stationery stand; the records of many patients; the phenomena of life, of illness, of emotion, of physical and mental behavior; the restfulness of relaxation; the need to attend to one's needs; the need to attend to one's tension while looking at the desk or the paper-weight or the filing cabinet; the comfort of withdrawal from the environment; fatigue and its development; the unchanging character of the desk; the monotony of the filing cabinet; the need to take a rest; the comfort of closing one's eyes; the relaxing sensation of a deep breath; the delight of learning passively; the capacity for intellectual learning by the unconscious." Various other similar brief interjections were offered, slowly at first and then with increasing frequency.

Initially, these interjections were merely supplementary to the patient's own train of thought and utterances. At first, the effect was simply to stimulate him to further effort. As this response was made, it became possible to utilize his acceptance of stimulation of his behavior by a procedure of pausing and hesitating in the completion of an interjection. This served to effect in him an expectant dependency upon the writer for further and more complete stimulation.

As this procedure was continued, gradually and unnoticeably to the patient, his attention was progressively directed to inner subjective experiential matters. It then became possible to use almost directly a simple, progressive relaxation technique of trance induction and to secure a light medium trance.

Throughout therapy, further trance inductions were basically comparable, although the procedure became progressively abbreviated.

Example 2. Comparable to the first patient was the woman who presented a somewhat similar problem. She stated that, in all previous attempts to secure therapy, she had been defeated in her efforts by a compulsive attentiveness to the minutiae of the immediate environment. She invariably had difficulty in completing her history and in attending to what was said to her because of an overpowering need to attend and to comment upon what she saw about her. (Even this small amount of history was interrupted by her inquiries about or simple mention of various objects in the office.) A psychiatrist and a family friend had suggested that hypnosis might enable her to cooperate in therapy and had referred her to the writer.

Since she had impressed the writer as a possible candidate for hypnotherapy and because little progress was being made in the interview, hypnosis was attempted by utilizing her own behavior in the following fashion:

As she inquired about a paperweight on the desk, reply was quickly made, "It is on the corner of the desk just behind the clock." As she flicked her gaze to the clock and asked urgently, "What time is it?" she was answered with, "The minute hand indicates the same numeral as does the desk calendar."

There followed a whole series of comments and inquiries by her without pause for any replies and with a rapid shifting from one object or subject to another. Her behavior was similar to that of an unhappy small child, warding off questioning by directing the interrogation into irrelevant, distracting avenues.

It was not possible to interrupt her verbal flow except with difficulty, and then fruitlessly. However, the measure of extending a paper knife compelled her to make mention of it. As she responded and then continued in her monologue, the writer polished his glasses, again forcing her to make a comment in accord with her pattern of behavior. Next she was interrupted by a placing of the glasses in their case; then the desk blotter was shifted, a glance was directed at the bookcase, and the schedule book opened and closed.

Each of these acts was fitted by her into her compulsive stream of utterances. At first, these various acts were performed by the writer at intervals and rather quickly. As she developed an attitude of expectation for the writer's silent interruptions, his movements were deliberately slowed and made with slight hesitant pauses. This compelled her to slow her own behavior and to await the writer's utilization of her conduct. Then the writer added to his silent indication of objects an identifying word or phrase of comment.

This continued procedure had a progressively profound inhibitory effect upon her, so that she began to depend more and more exclusively upon the writer to indicate either verbally or by gesture the next object she was to comment upon or to name. After about 40 minutes of this, it became possible to instruct her to close her eyes and to name from memory everything that she had seen and to do this until she developed a deep hypnotic sleep. As she obeyed, she was prompted, "And now, 'paperweight,' and deeper asleep; and now 'clock,' go even deeper into the trance," etc., until in another 10 minutes, a profound somnambulistic trance state was secured.

Thereafter, through this measure of utilizing as an induction technique her own pattern of resistant behavior, ready cooperation in therapy marked the clinical course of this previously "impossible" patient. Initially, each therapeutic session began with her compulsive behavior which was immediately utilized for the induction of another therapeutic trance. Later, a simple gesture indicating the chair in which she was to sit sufficed to elicit a trance state.

Example 3. Essentially the same procedure was employed with a male patient in his early 30's who entered the office and began pacing the floor. He explained repetitiously that he could not endure relating his problems sitting quietly or lying on a couch. He had repeatedly been discharged by various psychiatrists because they "accused" him of lack of cooperation. He asked that hypnotherapy be employed, if possible, since his anxieties were almost unendurable and always increased in intensity in a psychiatrist's office making it necessary for him to pace the floor constantly.

Further repetitious explanation of his need to pace the floor was finally successfully interrupted by the question, "Are you willing to cooperate with me by continuing to pace the floor, even as you are doing now?" His reply was a startled, "Willing? Good God, man! I've got to do it if I stay in the office."

Thereupon, he was asked to permit the writer to participate in his pacing by the measure of directing it in part. To this he agreed rather bewilderedly. He was asked to pace back and forth, to turn to the right, to the left, to walk away from the chair, and to walk toward it. At first, these instructions were given in a tempo matching his step. Gradually, the tempo of the instructions was slowed and the wording changed to, "Now turn to the right away from the chair in which you can sit; turn left toward the chair in which you can sit; walk away from the chair in which you can sit; walk

toward the chair in which you can sit," etc. With this wording, a foundation was laid for more cooperative behavior.

The tempo was slowed still more and the instructions again varied to include the phrase, "The chair which you will soon approach as if to seat yourself comfortably;" this in turn was altered to "The chair in which you will shortly find yourself sitting comfortably."

His pacing became progressively slower and more and more dependent upon the writer's verbal instructions until direct suggestions could be given that he seat himself in the chair and go deeper and deeper into a profound trance as he related his history.

Approximately 45 minutes were spent in this manner inducing a medium trance that so lessened the patient's tension and anxiety that he could cooperate readily with therapy thereafter.

The value of this type of Utilization Technique lies in its effective demonstration to the patient that he is completely acceptable and that the therapist can deal effectively with him regardless of his behavior. *It meets both the patient's presenting needs and it employs as the significant part of the induction procedure the very behavior that dominates the patient.*

Another type of utilization technique is the employment of the patient's inner, as opposed to his outer, behavior; that is, using his thoughts and understandings as the basis for the induction procedure. This technique has been employed experimentally and also in therapeutic situations where the patient's type of resistances made it advisable. It has been effectively used on naive subjects. Ordinarily, good intelligence and some degree of sophistication, as well as earnestness of purpose are required.

The procedure is relatively simple. The experimental or therapeutic subject is either asked or allowed to express freely his thoughts, understandings and opinions. He is then encouraged to speculate aloud more and more extensively upon what could be the possible course of his thinking and feeling if he were to develop a trance state. As the patient does this, or even if he merely protests the impossibility of such speculation, his utterances are repeated after him in their essence as if the operator were either earnestly seeking further understanding or were confirming his statements. Thus, further comment by the subject is elicited and repeated in turn by the operator. In the more sophisticated subject, there tends to be greater spontaneity; but occasionally the naive, even uneducated subject may prove to be remarkably responsive.

With this technique, the patient's utterances may vary greatly from one instance to another, but the following example is given in sufficient detail to illustrate the method.

Example 4. This patient, in seeking psychiatric help, declared, "I've made no progress at all in three years of psychoanalysis, and the year I spent in hypnotherapy was a total loss. I didn't even go into a trance. I tried hard enough. I just got nowhere. I've been referred to you and I don't see much sense in it. Probably another failure. I just can't conceive of me going into a trance. I don't even know what a trance is." These remarks, together with the information received previously from the referring physician, suggested the possibility of employing her own verbalization as the induction procedure.

The writer's utterances are in italics:

You really can't conceive of what a trance is—no, I can't, what is it?—yes, what is it?—a psychological state, I suppose—A psychological state you suppose, what else?—I don't know—you really don't know—no, I don't—you don't, you wonder, you think—think what—yes, what do you think, feel, sense?—(pause)—I don't know—but you

can wonder—do you go to sleep?—no, tired, relaxed, sleepy—really tired—so very tired and relaxed, what else?—I'm puzzled—puzzles you, you wonder, you think, you feel, what do you feel?—my eyes—yes, your eyes, how?—they seem blurred—blurred, closing—(pause)—they are closing—closing, breathing deeper—(pause)—tired and relaxed, what else?—(pause)—sleep, tired, relaxed, sleep, breathing deeper—(pause)—what else—I feel funny—funny, so comfortable, really learning,—(pause)—learning, yes, learning more and more—(pause)—eyes closed, breathing deeply, relaxed, comfortable, so very comfortable, what else?—(pause)—I don't know—you really don't know, but really learning to go deeper and deeper—(pause)—too tired to talk, just sleep—maybe a word or two—I don't know (spoken laboriously)—breathing deeper and you really don't know, just going deeper, sleeping soundly, more and more soundly, not caring, just learning, continuing ever deeper and deeper and learning more and more with your unconscious mind.

From this point on it was possible to deal with her simply and directly without any special elaborations of suggestions. Subsequent trances were secured through the use of post-hypnotic suggestions.

The above is simply a summary of the illustrative utterances and the method of utilization. In general, there is much more repetition, usually only of certain ideas, and these vary from patient to patient. Sometimes this technique proves to be decidedly rapid. Frequently with anxious, fearful patients, it serves to comfort them with a conviction that they are secure, that nothing is being done to them or being imposed upon them, and they feel that they can comfortably be aware of every step of the procedure. Consequently, they are able to give full cooperation which would be difficult to secure if they were to feel that a pattern of behavior was being forcibly imposed upon them.

The general principle of the above technique can be readily adapted into a separate Utilization Technique, somewhat parallel in character, but a definitely different, effective reinduction technique for those patients previously good hypnotic subjects but who, for one reason or another, have become highly resistant to hypnosis despite outward cooperativeness.

The procedure is to get the subject to recall from the beginning in a reasonably orderly, detailed manner the events of a previous successful hypnotic trance. As the subject does this, repetitions of his statements are offered and helpful questions are asked. As he becomes absorbed in this task, the subject revivifies the previous trance state, usually regressing subjectively to that previous situation and developing a special rapport with the operator.

Example 5. A volunteer subject at a lecture before a university group declared, "I was hypnotized once several years ago. It was a light trance, not very satisfactory, and while I would like to cooperate with you, I'm quite certain that I can't be hypnotized." "Do you recall the physical setting of that trance?" "Oh yes, it was in the psychology laboratory of the university I was then attending." "Could you tell me what you sit here, recall and describe to me the physical setting of that trance situation?"

He agreeably proceeded to describe in detail the laboratory in which he had been hypnotized lightly, including a description of the chair in which he had sat, and a description of the professor who induced the trance. This was followed by a comparable response to the writer's request that he describe in as orderly and as comprehensive a fashion as possible his recollection of the actual suggestions given him at that time and the responses he made to them.

Slowly, thoughtfully, the subject described an eye closure technique with suggestions of relaxation, fatigue and sleep. As he progressed in his verbalizations of his recollections, his eyes slowly closed, his body relaxed, his speech became slower and more hesitant; he required increasingly more prompting until it became evident that he was in a

trance state. Thereupon, he was asked to state where he was and who was present. He named the previous university and the former professor. Immediately, he was asked to listen carefully to what the writer had to say also, and he was then employed to demonstrate the phenomena of the deep trance.

This technique of utilizing previous hypnotic learnings has been employed with patients, particularly those who inexplicably develop resistances to further hypnosis, or who declare that they have been in hypnotherapy elsewhere, and therefore doubt seriously their ability to develop a trance for a new hypnotherapist. The simple measure of seating the patient comfortably and asking him to give a detailed account of a previous successful trance experience results in a trance, usually decidedly rapidly and usually a revivification of or even a regression to the previous trance. This technique can also be utilized with one's own patients who have developed resistance to further hypnosis. In such instances, resolution of the resistances is frequently greatly facilitated and therapy accelerated.

Another comparable Utilization Technique has been employed experimentally and clinically on both naive and experienced subjects. It has been used as a means of circumventing resistances, as a method of initial trance induction, and as a trance reinduction procedure. It is a technique based upon an immediate direct eliciting of meaningful unconsciously executed behavior which is separate and apart from consciously directed activity except that of interested attention. The procedure is as follows:

Example 6. Depending upon the subject's educational background, a suitable casual explanation is given of the general concepts of the conscious and of the unconscious or subconscious minds. Similarly, a casual though carefully instructive explanation is given of ideomotor activity with a citing of familiar examples, including hand levitation.

Then, with utter simplicity, the subject is told to sit quietly, to rest his hands palm down on his thighs, and to listen carefully to a question that will be asked. This question, it is explained, is possible of answer only by his unconscious mind, not by his conscious mind. He can, it is added, offer a conscious reply, but such a reply will be only a conscious statement and not an actual reply to the question. As for the question itself, it can be one of several that could be asked, and it is of no particular significance to the person. Its only purpose is to give the unconscious mind an opportunity to manifest itself in the answer given. The further explanation is offered that the answer to the question asked the unconscious mind will be an ideomotor response of one or the other lifting upward, that of the left signifying "no," and that of the right "yes."

The question is then presented: "Does your unconscious mind think that you can go into a trance?" Further elaboration is offered: "Consciously you cannot know what your unconscious mind thinks or knows. But your unconscious mind can let your conscious mind discover what it thinks or understands by the simple process of causing a levitation of either the right or the left hand. Thus your unconscious mind can communicate in a visibly recognizable way with your conscious mind. Now just watch your hands and see what the answer is. Neither you nor I know what your unconscious mind thinks, but as you see, one or the other of your hands lifting, you will know."

If there is much delay, additional suggestions can be given: "One of your hands is lifting. Try to notice the slightest movement, try to feel and to see it, enjoy the sensation of its lifting and be pleased to learn what your unconscious thinks."

Regardless of which hand levitates, a trance state frequently of the somnambulistic type supervenes simultaneously. Usually, it is advisable to utilize, rather than to test, the trance immediately since the subject tends to arouse promptly. This is often best done by remarking simply and casually, "It is very pleasing to discover that your unconscious can communicate with your conscious mind in this way. There are many

other things that your unconscious can learn to do. For example, now that it has learned that it can develop a trance state and to do it remarkably well, it can learn various trance phenomena. For instance, you might be interested in—." The needs of the situation can then be met.

This technique centers around the utilization of the subject's interest in his own unconscious activity. A "yes" or "no" situation is outlined concerning thinking with action contingent upon that thinking and constituting an overt unconscious communication, a manifestation basic to and an integral part of a hypnotic trance. In other words, it is necessary for the subject to go into a trance in order to discover the answer to the question.

Experienced subjects approached with this technique have recognized this immediately: "How interesting! No matter which answer you give, you have to go into a trance first."

Willing subjects disclose their unaffected interest from the beginning. Resistant subjects manifest their attitudes by difficulty in understanding the preliminary explanations, by asking repeatedly for instructions and then by an anticipation of hand levitation by lifting the left hand voluntarily. Those subjects who object to trance induction in this manner tend to awaken at the first effort to test or to utilize the trance. Most of them, however, will readily go back into the trance immediately when told, "And you can go into a trance just as easily and quickly as your unconscious answered that question just by continuing to watch as your unconscious mind continues to move your hand up toward your face. As your hand moves up, your eyes will close, and you will go into a deep trance." In nearly all instances, the subject then develops a trance state.

An essential consideration in this technique is an attitude of utter expectance, casualness and simplicity on the part of the operator which places the responsibility for any developments entirely upon the subject.

A patient's misunderstandings, doubts and uncertainties may also be utilized as the technique of induction. Exemplifying this approach are the instances of two patients, both college trained women, one in her late 30's, the other in her early 40's.

Example 7. One patient expressed extreme doubt and uncertainty about the validity of hypnotic phenomena as applied to herself but explained that her desperate need for help compelled her to try hypnosis as a remotely possible means of therapy.

The other declared her conviction that hypnosis and physiological sleep were identical and that she could not possibly go into a trance without first developing physiological sleep. This, she explained, would preclude therapy; yet she felt that hypnosis offered the only possible, however questionable, means of psychotherapy for her, provided that the hypnotherapy was so conducted as to preclude physiological sleep. That this was possible, she disbelieved completely.

Efforts at explanation were futile and served only to increase the anxiety and tension of both patients. Therefore an approach utilizing their misapprehensions was used. The technique, except for the emphasis employed, was essentially the same for both patients. This was done by instructing each patient that deep hypnosis would be induced. They were to cooperate in going into a deep trance by assessing, appraising, evaluating and examining the validity and genuineness of each item of reality and of each item of subjective experience that was mentioned. In so doing, each was to feel under obligation to discredit and to reject anything that seemed at all uncertain or questionable. For the one, emphasis was placed primarily upon subjective sensations and reactions with an interspersed commentary upon reality objects. For the other, attentiveness to reality objects as proof of wakefulness was emphasized with an interspersing of suggestions of subjective responses. In this manner, there was effected for each a progressive narrowing of the field of awareness and a corresponding increase in a dependence upon and a responsiveness to the writer. It became possible to induce in each a somnambulistic trance by employing a simple eye closure progressive relaxation technique slightly paraphrased to meet the special needs of each of the two patients.

The following sample of utterances, in which the emphasis is approximately evenly divided between subjective aspects and reality objects, is offered to illustrate the actual verbalization employed.

"As you sit comfortably in that chair, you can feel the weight of your arms resting on

the arms of the chair. And your eyes are open and you can see the desk and there is only the ordinary blinking of the eyelids which you may or may not notice, just as one may notice the feeling of the shoes on one's feet and then again forget about it. And you really know that you can see the bookcase and you can wonder if your unconscious has noted any particular book title. But now again you can note the feeling of the shoes on your feet as they rest on the floor, and at the same time you can become aware of the lowering of your eyelids as you direct your gaze upon the floor. And your arms are still resting their weight on the arms of the chair, and all these things are real and you can be attentive to them and sense them. And if you look at your wrist and then look at the corner of the room, perhaps you can feel or sense the change in your visual focus. Perhaps you can remember when, as a child, you may have played with the experience of looking at an object as if it were far off and then close by. And as associated memories of your childhood pass through your mind, they can range from simple memories to tired feelings because memories are real. They are things, even though abstract, as real as the chair and the desk and the tired feeling that comes from sitting without moving, and for which one can compensate by relaxing the muscles and sensing the weight of the body, just as one can feel so vividly the weariness of the eyelids as fatigue and relaxation develop more and more. And all that has been said is real and your attention to it is real and you can feel and sense more and more as you give your attention to your hand or to your foot or the desk or your breathing or to the memory of the feeling of comfort some time when you closed your eyes to rest your gaze. And you know that dreams are real, that one sees chairs and trees and people and hears and feels various things in his dreams and that visual and auditory images are as real as chairs and desks and bookcases that become visual images." In this way, with increasing frequency, the writer's utterances became simple, direct suggestions for subjective responses.

This technique of utilizing doubts and misunderstandings has been used with other patients and with experimental subjects. It is well suited to the use of hand levitation as a final development, since ideomotor activity within the visual range offers opportunity for excellent objective and subjective realities.

Another Utilization Technique centers around the need of some potentially excellent subjects to resist and reject hypnosis completely until after it has become paradoxically an accomplished personal experience.

Because of naiveté or misdirected resistance, such a person may develop occasionally somnambulistic trance; but thereafter, he is likely to reject hypnosis completely or to limit unduly and inexplicably his capacity for hypnotic responses. More frequently such subjects remain seemingly unhypnotizable, often despite an obvious capacity for responsiveness, until their special individual needs are met in a manner satisfying to them. Those who permit themselves limited hypnotic responses may, for example, develop an excellent obstetrical anesthesia but remain incapable of dental anesthesia, or vice versa. Should, by some chance, the second type of manifestation be secured, there may occur a loss of the capacity for the first type; or there may be a loss of capacity for all hypnotic responses. Another similar example is the patient in psychotherapy who will respond hypnotically only to specific types of circumscribed therapeutic problems.

On the whole, these individuals constitute seemingly impossible, unpredictable and unreliable hypnotic subjects until their special needs are met; whereupon they can then become remarkably competent subjects. Following are accounts of this type of subject encountered in experimental and clinical work:

Example 8. A 20-year old girl, one of a group of psychology students actively engaged in experimental hypnosis both as subjects and operators, failed completely to develop any trance phenomena despite many hours of endeavor to enter hypnosis. She originally expressed a conviction that hypnosis was an impossible personal experience for her, but

then indicated she hoped to learn otherwise. Two of her associates, both competent as an operator or as a somnambulistic subject, finally suggested a visit to the writer as a last resort to which she agreed.

Miss X reaffirmed both her conviction and her hope and requested the writer to make every possible effort to induce a trance. Her entire appearance and behavior suggested that she was essentially a most responsive type of personality. After three hours of intensive effort with a great variety of both direct and indirect techniques, she was found to be outwardly cooperative but actually completely resistive and unresponsive hypnotically. This served to confirm Miss X in her conviction of her unhypnotizability and to suggest to the writer the experimental possibility of utilizing Miss X's need to resist and reject hypnosis as a means of effecting paradoxically trance phenomena or a trance state for her.

To achieve this, Miss X was reminded that her two companions, A and B, were excellent somnambules and could enter a deep trance at a moment's notice. A and B were then openly instructed to remain continuously in the state of psychological awareness that existed for them at the moment. They were not to betray in any way to Miss X whether or not they had spontaneously gone into hypnosis in response to the writer's efforts with Miss X. (They had not developed trance states, a fact obvious to the writer but not to Miss X.) Miss X was then challenged to scrutinize A and B carefully and to state definitely if she knew if they were in a trance. A and B, in turn, were told to answer honestly with a simple nod or shake of the head any question put to them when so instructed by the writer.

Miss X confessed her inability to identify the state of awareness of either A or B. She was reminded that she was awake and could not develop a trance state and hence could not manifest trance phenomena, but that A and B, being experienced subjects, could do so readily. She agreed. The statement was made that if A and B were in a trance state, negative visual hallucinations could be elicited. Again she agreed. Turning away from the three of them and facing the office wall, the writer offered the following instructions: "Miss X, I want you to observe carefully the responses of A and B since I shall not be looking at them. At the end of my remarks, I shall ask them a special question which they are to answer by either a nod or a shake of the head, as I explained before. All of you know the fish pond (a campus landmark), do you not? All of you can nod your head in answer. You have seen it many times, you know it well, and you can see it any time you want to. Miss X, observe A and B carefully and be ready to report their answer. A and B, while Miss X continues to await your response, DO NOT SEE (*speaking softly, emphatically, looking intently and pointing with slow deliberation at the office wall that was well within Miss X's field of vision*). DO NOT SEE THE FISH POND RIGHT THERE! And you don't see the fish pond, do you?" A and B both shook their heads negatively. Miss X excitedly declared, "They are both in a trance. They are showing negative hallucinations." Without comment to her, the writer asked A and B if they saw the students walking past the fish pond or the fish and plants in the water. A and B again shook their heads negatively.

Thereupon the writer suggested to Miss X that A and B be left to their own devices while she and he discussed hypnosis. She agreed and almost immediately declared that the demonstration of negative visual hallucinations on the part of A and B had convinced her in some way that she could be hypnotized and that she would be glad to volunteer at any time to go into a trance. She was certain that she could go into a deep trance.

Instead of replying directly to her statement, she was asked if she were willing to talk to A and B. Upon her assent, they were told to ask Miss X the written questions the writer had just handed to them. They asked her if she could see the fish pond and the students walking past it. Upon her affirmative reply, she was asked to state exactly where she was. She described herself as standing with them and with the writer some ten feet away from the campus fish pond.

She was then told by the writer that A and B would be awakened from their "trance" by the simple measure of having them, *while she did likewise*, close their eyes. Then, at the count of three, there would be a full awakening from all trance states with the continuing ability to go into a trance at any desired future time for any legitimate purpose.

She awakened from her trance as instructed with a complete spontaneous amnesia for trance events and with an apparent persistence of her original ideas of her unhypnotizability. The trio was then dismissed. A and B were privately instructed to avoid all mention of hypnosis.

The next day, Miss X again volunteered as a subject at the psychology laboratory and developed rapidly a profound somnambulistic trance. So pleased was she that she visited the writer that evening with the request that he make another attempt to hypnotize her. She responded almost immediately with a deep trance and thereafter did extensive work as an experimental subject.

Example 9. A clinical instance in which this same technique was employed centers around an obstreperous 25-year-old patient for whom hypnotherapy was not indicated. Nevertheless, he repeatedly demanded hypnosis and in the same breath declared himself unhypnotizable. On one occasion, he forced the issue by demanding absolutely, "Hypnotize me even though I'm not hypnotizable."

This demand was met by employing softly spoken suggestions of slow, progressive relaxation, fatigue and sleep. Throughout the hour that this was done, the patient sat on the edge of his chair, gesticulated, and bitterly denounced the entire procedure as stupid and incompetent. At the close of the session, the patient declared that his time and money had been wasted. He could "remember every ineffectual, stupid suggestion" that had been offered and could "remember everything that took place the whole time."

The writer immediately seized upon these utterances to declare, somewhat repetitiously, "Certainly you remember. You are here in the office. Naturally here in the office you can remember everything. It all occurred here in the office and you were here and here you can remember everything." The patient impatiently demanded another appointment and left angrily.

At the next appointment, he was deliberately met in the reception room. He immediately inquired if he had kept his previous appointment. Reply was given evasively that surely he would remember if he had done so. He explained that on that day, he had suddenly found himself sitting in his car unable to remember if he had just returned from his appointment or were just leaving for it. This question he debated for an indefinite period of time before he thought of checking with his watch and then he discovered that the time was long past the proper hour. However, he was still unable to decide the problem because he did not know how long he had debated the question. He asked, again, if he had kept his previous appointment, and again he was assured evasively that surely he would remember if he had.

As he entered the office, he stopped short and declared, "I did too keep my appointment. You wasted my time with that silly, soft, gentle, ineffectual hypnotic technique of yours, and you failed miserably."

After a few more derogatory comments, he was maneuvered into returning to the reception room where he again manifested an amnesia for the previous appointment as well as his original inquiries about it. His questions were once more parried. He was led back into the office, where for a second time he experienced full recall of the previous appointment.

Again he was induced to return to the reception room with a resultant reestablishment of his amnesia. Upon reentering the office, he added to his recollection of the previous appointment a full recall of his separate entrances into the reception room and the accompanying amnesic states. This bewildered and intrigued him to such an extent that he spent most of the hour going from the office to the reception room and back again. He experienced a full amnesia in the reception room, and full recollection of the total experience inclusive of the reception room manifestations in the office.

The therapeutic effect of this hypnotic experience was the almost immediate correction of much of the patient's hostile, antagonistic, hypercritical, demanding attitude and the establishment of a good rapport. An acceleration of therapy resulted even though no further hypnosis was employed.

Patients requiring the use of this technique are usually those with a distressing need for a sense of utter security in the competence of the therapist. Its advantages as a therapeutic technique lie in the fact that it permits the patient to achieve that sense of security

through experiential learning as a single separate process, rather than through a prolonged demonstration of competence always subject to criticism and rejection.

This technique is no more than a modification of much simpler elementary procedures such as the hand clasp and the postural sway, sometimes so effectively employed to correct minor attitudes of doubt and resistance to trance induction. Its advantages lie in the effectiveness with which it can elicit the phenomena of deep hypnosis and correct various problems of resistance to hypnosis and therapy.

Example 10. Another Utilization Technique was employed during a lecture and demonstration before a medical student body. At the beginning of the lecture, one of the students proceeded to heckle the writer. He denounced hypnosis as a fraud, the writer as a charlatan and declared that any demonstration using his fellow students would be a prearranged hoax perpetrated upon the audience. Since he persisted in his noisy, adverse comments, it became necessary to take corrective action. Accordingly, the lecture was interrupted and the writer engaged in an acrimonious interchange with the heckler.

The writer's utterances were carefully worded to elicit either verbally or by action an emphatic contradiction from the heckler, who was told that he had to remain silent; that he could not speak again, that he did not dare stand up; that he could not again charge fraud; that he dared not walk over to the aisle or up to the front of the auditorium; that he had to do whatever the writer demanded; that he had to sit down; that he had to return to his original seat; that he was afraid of the writer; that he dared not risk being hypnotized; that he was a noisy coward; that he was afraid to look at the volunteer subjects sitting on the platform; that he had to take a seat in the back of the auditorium; that he had to leave the auditorium; that he did not dare to come up on the platform; that he was afraid to shake hands in a friendly fashion with the writer; that he did not dare to remain silent; that he was afraid to walk over to one of the chairs on the platform for volunteer subjects; that he was afraid to face the audience and to smile at them; that he dared not look at or listen to the writer; that he could not sit in one of the chairs; that he would have to put his hands behind him instead of resting them on his thighs; that he dared not experience hand levitation; that he was afraid to close his eyes; that he had to remain awake; that he was afraid to go into a trance; that he had to hurry off the platform; that he could not remain and go into a trance; that he could not even develop a light trance; that he dared not go into a deep trance, etc.

The student disputed by word or action every step of the procedure with considerable ease until he was forced into silence. With his dissents then limited to action alone, and caught in his own pattern of contradiction of the writer, it became relatively easy to induce a somnambulistic trance state. He was then employed as the demonstration subject for the lecture most effectively.

The next weekend, he sought out the writer, gave an account of his extensive personal unhappiness and unpopularity and requested psychotherapy. In this, he progressed with phenomenal rapidity and success.

This technique, in part or *in toto*, has been used repeatedly in various modifications, especially with defiant, resistive patients, particularly the "incorrigible" juvenile delinquent. Its significance lies in the utilization of the patient's ambivalences and the opportunity such an approach affords the patient to achieve successfully contradictory goals, with the feeling that these derived out of the unexpected but adequate use of his own behavior. This need to meet fully the demands of the patient, however manifested, ought never to be minimized.

Another Technique of Utilization centers around a combination of utilization, distraction and participatory activity illustrated in the following account:

Example 11. Seven-year-old Allan fell on a broken bottle and severely lacerated his leg. He came rushing into the kitchen crying loudly from pain and fright, shouting, "It's bleeding, it's bleeding!"

As he entered the kitchen, he seized a towel and began swabbing wildly to wipe up the blood. When he paused in his shouting to catch his breath, he was urgently told, "Wipe

up that blood; wipe up that blood; use a bath towel; use a bath towel; use a bath towel; a bath towel, not a hand towel, a bath towel," and one was handed to him. He dropped the towel he had already used. He was immediately told urgently and repetitiously, "Now wrap it around your leg, wrap it tightly, wrap it tightly."

This he did awkwardly but sufficiently effectively. Thereupon, with continued urgency, he was told, "Now hold it tight, hold it tight; let's get in the car and go to the doctor's office; hold it tightly."

All the way to the surgeon's office, careful explanation was given him that his injury was really not large enough to warrant as many stitches as his sister had had at the time of her hand injury. However, he was urgently counselled and exhorted that it would be entirely his responsibility to see to it that the surgeon put in as many stitches as possible. All the way there, he was thoroughly coached on how to demand emphatically his full rights.

Without awaiting any inquiry, Allan emphatically told the nurse at the surgeon's office that he wanted 100 stitches. She merely said, "This way, sir, right to the surgery." Allan was told, as she was followed, "That's just the nurse. The doctor is in the next room. Now don't forget to tell him everything just the way you want it."

As Allan entered the room, he announced to the surgeon, "I want 100 stitches. See!" Whipping off the towel, he pointed at his leg and declared, "Right there, 100 stitches. That's a lot more than Betty Alice had. And don't put them too far apart. And don't get in my way. I want to see. I got to count them. And I want black thread, so you can see it. Hey, I don't want a bandage. I want stitches!"

It was explained to the surgeon that Allan understood well his situation and needed no anesthesia. To Allan, the writer explained that his leg would first have to be washed. Then he was to watch the placing of the sutures carefully to make sure they were not too far apart; he was to count each one carefully and not to make any mistakes in his counting.

Allan counted the sutures and rechecked his counting while the surgeon performed his task in puzzled silence. He demanded that the sutures be placed closer together and complainingly lamented that he would not have as many as his sister. His parting statement was to the effect that, with a little more effort, the surgeon could have given him more sutures.

On the way home, Allan was comforted regarding the paucity of the sutures and adequately complimented on his competence in overseeing the entire procedure so well. It was also suggested that he eat a big dinner and go to sleep right afterwards. Thus his leg could heal faster and he would not have to go to the hospital the way his sister did. Full of zeal, Allan did as suggested.

No mention of pain or anesthesia was made at any time nor were any "comforting reassurances" offered. Neither was there any formal effort to induce a trance. Instead, various aspects of the total situation were utilized to distract Allan's attention completely away from the painful considerations and to focus it upon values of importance to a seven-year-old boy in order to secure his full, active cooperation and intense participation in dealing with the entire problem adequately.

In situations such as this, the patient experiences a tremendously urgent need to have something done. Recognition of this need, and a readiness to utilize it by doing something in direct relationship to the origin of the need, constitutes a most effective type of suggestion in securing the patient's full cooperation for adequate measures.

Example 12. Little Roxanna came sobbing into the house, distressed by an inconsequential (but not to her) scratch upon her knee. Adequate therapy was not assurance that the injury was too minor to warrant treatment, nor even the statement that she was mother's brave little girl and that mother would kiss her and the pain would cease and the scratch would heal. Instead, effective therapy was based upon the utilization of the personality need for something to be done in direct relationship to the injury. Hence, a kiss to the right, a kiss to the left and a kiss right on top of the scratch effected for Roxie

an instantaneous healing of the wound and the whole incident became a part of her thrilling historical past.

This type of technique based upon the utilization of strong personality needs is effective with children and adults. It can readily be adapted to situations requiring in some way strong, active, intense responses and participation by the patient.

In one form or another, these techniques of suggestive therapy are in the repertoire of every experienced mother and they are as old as motherhood. Every experienced general practitioner employs them regularly without necessarily recognizing them formally as based upon suggestion. But with the development of clinical hypnosis, there is a need to examine into and to give recognition to those psychological principles that enable the communication of desirable understandings at times of stress.

Another utilization technique is based upon a process of conditioning behavioral manifestations and then interpolating into them new and corrective forms of behavior.

Example 13. An example of this is the therapy employed to correct the nightmares developed during convalescence by seven-year-old Robert, a traffic casualty suffering from skull fracture, brain concussion, fractured thighs and other varied injuries.

Upon his return home from the hospital in a body cast, he was noted almost nightly to suffer from nightmares. These followed the same pattern each time: They would begin with moaning, crying, shuddering sobs and finally culminate with the frightened cries, "Oh, oh, it's going to hit me—it's going to hit me," followed by a shuddering collapse into silence and slow, shallow breathing as if he had fainted.

Sometimes several nightmares would occur in a single night; sometimes only one; sometimes a night would be skipped. Robert had no waking memory of these nightmares.

At first an effort was made to arouse Robert from the nightmares but the first few attempts were futile. When the lights were turned on in his bedroom, his eyes were found to be wide open, pupils dilated, with his face contorted in an expression of terror. His attention could not be secured. When he repeated his phrase of "It's going to hit me," his eyes would shut, his entire body relax and he would remain unresponsive, as if in a faint for several minutes. Then he would lapse into physiological sleep from which he could be aroused, but with no subsequent memory of the nightmare. When these findings had been confirmed repeatedly, a technique was devised to secure his attention and to correct the nightmare.

The approach to the problem was relatively simple and comprehensive. It was based on the assumption that the nightmares were a distorted and disorderly, perhaps even fragmentary, reliving of the accident. Therefore, they could not simply be eliminated or overthrown. They would have to be accepted, modified and then corrected. The procedure was as follows: At the beginning of his nightmare when his moaning began, Robert was told in a cadence and tone that matched his outcries, "Something's going to happen—it's going to hurt you bad—it's a truck—it's coming right at you—it's going to hurt you—it's going to hit you—hit you—hurt you—hit you—hurt you awful bad." These utterances were matched to his outcries and were terminated with his collapse. An effort was made to parallel in time and character the inner subjective stimulation Robert was experiencing with external stimulation. In this way, it was hoped to effect an association between the two experiences and possibly to condition the one to the other.

The first night the procedure was employed, Robert had two nightmares. The next night he again had two more. After a long wait, while he was sleeping peacefully, the procedure was employed again and a third nightmare developed almost immediately.

On the third night, after he had been sleeping peacefully for some time and before a nightmare had developed, the procedure was deliberately employed twice. Both times a nightmare resulted, apparently in response to the procedure. A third nightmare was elicited later that night by the same procedure, with the addition of a new phrase to

capitalize upon wishes and feelings without distorting the reality involved. This phrase was the statement, "There is another truck on the other side of the street and that one won't hit you. It will just go right by." The reason for this interpolation was to employ an idea that would be entirely acceptable, yet would not alter the historical reality. If accepted, the way would then be paved for more pertinent future interpolations.

The next night, Robert developed a spontaneous nightmare which was treated by the modified procedure. A second nightmare was deliberately induced later that night and handled by a still further modification, the change being the addition of: "But you will get well, all well, all well."

Thereafter, night after night when he developed a spontaneous nightmare, this general procedure was followed. His utterances and cries were matched; each time there was a progressive modification of the writer's utterances until the final content was nothing more than, "There's a truck coming, and it is too bad it is going to hit you. You will have to go to the hospital. But that will be all right because you will come home. And you will get all well. And all the other cars and trucks on the street you will see and keep out of their way."

As the statements said to him were progressively changed, the character and severity of Robert's nightmares slowly lessened until it seemed he was merely rousing slightly and listening for the reassurance offered.

From beginning to end, the therapy of the nightmares covered a period of one month. The last three were scarcely more than a slight seeming arousal from sleep, as if to assure himself vaguely of the writer's presence. Thereafter, to his present age of 14, he has continued to sleep well without a recurrence of his nightmares.

The following Utilization Technique is based upon the employment of seemingly inconsequential irrelevant considerations and an apparent disregard or oversight of the major issues involved:

Example 14. A 70-year-old woman born in a rural community, had not been allowed to attend school, since her parents did not believe in education for women. At the age of 14, she married a youth of 16, whose formal education was limited to his signature for signing checks and "figgering." The bride was pleased with her husband's greater education and resolved to have him teach her, since she resented her lack of schooling. This hope did not materialize. During the next six years, she was kept busy with farm work and pregnancies. She did learn to "figger" excellently but only mentally, since it was apparently impossible for her to learn to inscribe numerals. Neither was she able to learn to sign her name.

At the age of 20, she hit upon the idea of furnishing room and board for the local rural schoolteacher with the intention of receiving, in return for reduced rates, the much desired instruction in reading and writing.

Each school year for the next 50 years, she made and kept her agreement. The teachers hopefully began the attempt and finally, some soon, others only after prolonged labor, abandoned the task of teaching her as hopeless. As the community grew, the number of teachers increased until she was boarding year after year a total of four. None succeeded, despite the sincerity of her desire and the honesty of their effort. Her children went through grade school, high school and college. They, too, tried to instruct their mother but without results.

Each time she was given a lesson, she invariably developed a state of mental blankness after the manner of a seriously frightened small child or a state of frantic disorganized efforts to please that led to a total impasse.

It was not that "Maw" was unintelligent. She had an excellent memory, good critical judgment, listened well and was remarkably well informed. She often gave strangers the impression through her conversation that she had a college education, despite her faulty grammar.

At the time she was seen by the writer, she and her husband had been retired for some years. She was still boarding three teachers at that time. These three had made it a joint project for several months to teach her the elements of reading and writing but were

finally forced to give up. They stated, "It's always the same. She starts the lesson period full of enthusiasm and hope and that's the way you feel, too. But inside of a minute you'll swear that you must be talking a foreign language to her because she doesn't understand a thing. No matter what you say or do, she just sits there with those eager, troubled eyes, trying hard to make sense out of the nonsense you seem to be saying to her. We've tried everything. We've talked to some of our friends who have tried. She is just like a badly scared child who has blanked out completely, except that she doesn't seem scared but just blanked out. Because she is so intelligent, we just couldn't believe that she couldn't learn easily."

The patient herself explained, "My sons that graduated from engineering told me that I've got the right gears for reading and writing, but that they are of different sizes and that's the reason they don't mesh. Now you can file them down or trim them to size because I've got to learn to read and write. Even boarding three teachers, baking, cooking, washing and ironing for them ain't half enough work for me. I get so tired sitting around with nothing to do. Can you learn me?"

This history (and other comparable material) suggested a long, persistent, circumscribed psychological blocking that might yield to hypnotic suggestion. Accordingly, she was accepted as a patient with the rash promise that she would be reading and writing within three weeks time, but *without being taught anything that she did not already know and had known for a long time.*

This declaration puzzled her greatly. Yet so great was her desire that she was easily persuaded to cooperate fully with the writer in every way, *even though he might not teach her anything except how to let her read and write, which she already knew.*

The next step was to induce a light-to-medium trance by simple, direct suggestions. This was predicated, in accord with her own unique neurotic needs, upon *her full understandings that it would be something apart from and completely unrelated to her learning problem; that there would be no effort to teach her anything she did not already know; that the trance would be employed only to let her do things she already knew how to do; and that everything undertaken would be something she had learned about a long time ago.* With her responses to hypnosis contingent upon these understandings, it became possible to induce a trance; to tell her to remain in it until otherwise instructed; and to obey completely and without argument every instruction given her, *provided that it was always something in relationship to things she had already learned a long time ago.*

Thereupon, paper and pencil were pushed toward her. She was told "not to write but just pick up the pencil any old way. Hold it in your hand any old way. You and I know you can do that. Any baby can pick up a pencil in any old way."

"O.K. Now make a mark on the paper; any old scribbling mark—*like a baby that can't write makes.* Just any old crooked mark! That's something you don't even have to learn."

"O.K. Now make a straight mark on the paper, like you make with a nail when you want to saw a board straight or with a stick when you make a row in the garden. You can make it short or long, or straight up and down, or just lying down."

"O.K. Now make a mark like the hole in a doughnut; then two marks like the halves of the doughnut when you break the doughnut in half."

"O.K. Now make two slanted marks; one like one side of the gable roof of a barn and the other like the other side."

"O.K. Now make a mark like a horse's crupper standing off the little end. And now poke the pencil at the paper and make just a little spot."

"O.K. Now all those marks you made you can make different sizes; in different places on the paper, in different order, and even one on top of the other or the next to another. O.K.?"

"Now, those marks that you made and can make again any old time are writing only you don't know that that is written. You don't have to believe that it is writing—all you have to do is know that you can make those marks. That isn't hard to know, because you already know it. Now I'm going to awaken you. Do the same thing all over. I want you to practice at home making those marks. O.K.?"

The procedure of the trance state was repeated in the waking state with the same

instructions. She was dismissed, not entirely pleased, but somewhat intrigued, with instructions to return the next day. A medium-to-deep trance was readily induced and it was learned that she had spent approximately two hours "making marks!" The explanation was then offered her that the only difference between a pile of lumber to construct a house and the completed house was that the latter was the former "merely put together." To this she agreed wonderingly. She was then shown a rectangle and told, "That's a rough plan of the side of a 40-foot barn." The rectangle was then bisected vertically and she was told, "Now it's a rough plan of two 20-foot barns end to end." Still wondering, she agreed.

She was then shown a neat copy of the "marks" she had made the previous day and asked to select those that could be used to make a small scale "rough plan" of the side of a 40-foot barn and to "mark out" such a plan. She was then to "split it in the middle" and to "mark out one 20-foot side of a barn up on top of another one the same size." Bewilderedly, she did so.

She was then asked to use the oblique lines to "mark out" the gable end of a roof, then one of the straight lines to "stretch halfway up from one side to the other like a scantling used to brace the end of the roof." Obediently she did. She was emphatically assured that she now knew how to put marks together, but that she should take half of the doughnut hole and use it repeatedly to "round off the corners of the side of the barn." This she did.

Thereupon, as an indisputable item of information, she was emphatically instructed that not only did she know how to write, but that this fact had been irrefutably established. This dogmatic statement puzzled her greatly without diminishing her cooperation. Before she could organize any thoughts on this matter, she was peremptorily instructed to inspect the "marks" and "put them together in 2's and 3's in different ways."

With a little judicious maneuvering and indirect guidance by the writer, it was possible to secure from among the various "combinations" she made the complete alphabet printed in block form. These were carefully reduplicated on a separate sheet of paper. Then a newspaper advertisement, magazine advertisements and a child's textbook were brought out. It was systematically pointed out that she, without recourse to a copying procedure, had printed each of the letters of the alphabet. She was then maneuvered into orienting her recognition of the letters, not by comparing her printed letters with those in the book, but by validating the letters in the book through their similarity to her own constructions. Great care was exerted to prevent her from losing this orientation. Her excitement, pleasure and interest were most striking. The entire procedure was then repeated in the waking state.

The next problem was to interest her safely in "letter building," "word building" and then "naming," not reading, each new construct. Each step was first accomplished in the trance state, then repeated in the waking state. No mention was made of writing or reading, circumlocutions being used. For example, she would be told, "Take some of these straight or crooked lines and build me another letter. Now build me a few letters alongside each other and name the word."

Then she was taught that "a dictionary is not a book to read; it is a book to look up words in; just like a picture book isn't for reading, it's just to look at pictures." With the dictionary, she was enabled to discover that she could use vertical, horizontal, oblique or curved lines to "build" any word in it. Great care was taken to emphasize the importance of "the right" name for each word—just like you never forget the correct name for a harrow, a disk or a cultivator."

As a succeeding step, she was taught the game of anagrams which was described as entirely comparable to tearing down "the back porch and using the old lumber to build on a new room with a kitchen sink." The task of "naming" the words became most fascinating to her.

The final step was to have her discover that "naming words is just like talking." This was achieved simply by having her "build" words taken from the dictionary, apparently chosen at random, but actually carefully selected by the writer which she was asked to "set down here or there on this straight line." Since the words were not put down in correct order but were in correct spacing, the final result when she was called upon to "name" them astonished her. The words were: "Get going Ma and put some grub on the

table." As she completed "naming" the words, she declared, "Why, that's what Pa always says—it's just like talking."

The transition from "talking words" to "reading words" was then a minor matter. Within three weeks' time, she was spending every spare minute with her dictionary and a *Reader's Digest*. She died of a cerebral hemorrhage at the age of 80, a most prolific reader and frequent letter writer to her children and grandchildren.

Example 15. The second instance concerns a nine year old girl who began failing all of her schoolwork and withdrawing from social contacts. When questioned, she would reply angrily or tearfully in a defensive fashion, "I just can't do nothing."

Inquiry disclosed good scholastic work in previous years, but poor adjustment on the playground in that she was inept, hesitant and awkward. However, her parents were concerned only about her scholastic rating and sought psychiatric aid for their daughter from the writer.

Since the girl would not come to the office, she was seen each evening in her home. One of the first bits of information elicited was that she didn't like certain girls because they were always playing jacks or roller-skating or jumping rope. "They never do anything that's fun." It was learned that she had a set of jacks and a ball but that she "played terrible." The writer challenged her, on the grounds that infantile paralysis had crippled his right arm, that he could play a "more terrible" game than she could. The challenge was accepted. After the first few evenings, a spirit of good competition and rapport developed and it was relatively easy to induce a light-to-medium trance. Some of the games were played in the trance state and some in the waking state. Within three weeks, she was an excellent player, though her parents were highly displeased because of the writer's apparent lack of interest in her scholastic difficulties.

After three weeks of playing jacks, the writer declared that he could be worse on roller skates than she since his leg was crippled. There followed the same course of developments as with the jacks; this time, it took only two weeks for her to develop reasonable skill. Next, she was challenged to jump the rope and see if she could possibly teach the writer this skill. In a week's time, she was adept.

The writer then challenged her to a bicycle race, pointing out that he could actually ride a bicycle well, as she herself knew. The statement was boldly made that he could beat her; only her conviction that he would defeat her allowed her to accept. However, she did promise in the trance state to try hard. She had owned a bicycle for more than six months and had not ridden it more than one city block.

At the appointed time, she appeared with her bicycle but demanded, "You have got to be honest and not just let me win. You got to try hard. I know you can ride fast enough to beat me. I'm going to watch you so you can't cheat."

The writer mounted his bike and she followed on hers. What she did not know was that the use of both legs in pedalling constituted for him a serious handicap in riding a bicycle and that ordinarily only his left leg is used. As the girl watched suspiciously, she saw the writer pedalling most laboriously with both feet without developing much speed. Finally convinced, she rode past to win the race to her complete satisfaction.

That was the last therapeutic interview. She promptly proceeded to become the grade school champion in jacks and rope jumping. Her scholastic work improved similarly.

Years later, the girl sought the writer out to inquire how he had managed to let her excel him in bicycle riding. Learning to play jacks, jump the rope and roller-skate had had the effect of bolstering her ego immensely; but she had discredited those achievements considerably because of the writer's physical handicaps. The bicycle riding, however, she knew was another matter.

She explained that she knew the writer to be a good bicyclist, was certain he could beat her and had no intention of letting the race be handed to her. The fact that the writer had tried genuinely hard and that she had beaten him convinced her she "could do anything." Elated with this conviction, she had found school and all it offered a most pleasant challenge.

A definitely different type of Utilization Technique is one in which the general reality situation is employed as the essential component of the induction procedure.

A basic consideration is a seemingly incidental or unintentional interference with the subject's spontaneous responses to the reality situation. This leads to a state of uncertainty, frustration and confusion in the subject, which in turn effects ready acceptance of hypnosis as a means of resolving the situation. It is, in essence, a combined utilization-confusion technique and can be used experimentally or clinically on both children and adults. Frequently a technique of choice, it is sometimes very simply and rapidly accomplished, with shy timid children and self-conscious adults. An illustrative instance is as follows:

Example 16. At a lecture before the professional staff of a hospital, a student nurse who had neither experienced nor witnessed hypnosis was authoritatively instructed by her superior to act as a "volunteer" subject for the writer. Although interested, she manifested definite resentment as she came forward hesitantly. Advantage was taken of her emotional state to employ a utilization technique that would effect, first, a state of confusion to obviate resistance and, secondly, the ready induction of hypnosis.

As she approached the front of the lecture room from a side aisle, a chair was moved somewhat ostentatiously into place for her. When she was within six feet of the chair, she was asked, "Will you sit in *this* chair *here*?" As the word "*This*" was spoken, the writer's left hand was carefully placed on the back of the chair, as if to point it out. As the word "*here*" was said, the writer gestured with his right hand, as if indicating a chair to the side of the actual chair. There was a momentary pause in her behavior. She continued her approach and the chair was pushed gently toward her, causing a slight but definitely audible noise as it scraped on the floor. When she came still closer to the chair, it was pulled slightly to one side away from her. Immediately, as she seemed to note this, it was pushed back an inch or so; then another inch or so forward and to the side toward her. All of this she noted because the writer's left hand on the back of the chair was so placed as to constitute a focusing point for her gaze.

By this time, she had reached the chair, turned and begun to lower her body into it. As soon as her knees were bent, the chair was rotated somewhat noisily about one inch. When she paused again momentarily to turn her head to look at the chair, the writer took hold of her right elbow, moved it slightly away from her body and then a bit forward. As she turned to look in response to this, her elbow was released, her right hand and wrist were taken gently and moved a little upward and then downward. When she shifted her gaze from her elbow to her hand she was told quietly, "Just sit *all the way down* in the chair and as you do so, close your eyes and go way deeply into the trance. And as you continue to sit there, sleep ever more deeply in a hypnotic trance." As she settled in the chair the additional statement was made, "And now you can take a deep comfortable breath while I go on with my lecture." Thereupon, without any further delay or training, she was immediately employed to demonstrate the somnambulistic trance and many other phenomena of deep hypnosis. She was awakened from the trance approximately an hour later.

An aspect of the original reality situation constituting a part of the utilization technique was reestablished at the time of awakening her by the writer again holding her right hand and wrist as he had at the moment of trance induction. Accordingly, in awakening, she reverted at once to the original state of conscious bewilderment which had been interrupted by the rapid development of a deep trance. This, along with a total amnesia for the events of the preceding hour, she demonstrated, by stating, "But you've got me so confused I don't know what to do. Is it all right to sit this way, and what do you want me to do with my hand?" Reply was made, "Would you like to go into a trance?" She answered, "I don't really know. I'm not sure. I don't even know if I can be hypnotized. I suppose maybe I could. I'm willing to try if you want me to." She still had no awareness that she had been in a trance and that an hour had elapsed. This amnesia continued to persist. She was asked what she meant by saying that she was confused. "Well, when I started to come up here, you asked me to sit in this chair. Then you started moving it first one way and then another. And then somehow you started to move my arm, and before I knew what you wanted, you started moving my hand and I'm still confused. What do you want me to do?"

In this last question, the subject defines adequately the goal of a confusion technique, whether based upon direct suggestions eliciting variously oriented and contradictory responses from the subject or, as in this instance, upon a utilization technique employing various aspects of the reality situation. This goal is an urgent pressing need on the part of the subject to have the confusion of the situation clarified. Hence, the suggestion of a trance state as a definitive idea is readily accepted and acted upon. In this instance, she accepted at once the instructions, "Sit down," "close your eyes," "sleep deeply." These instructions dispersed for her all of the confusion she had been experiencing.

For this subject, as in other instances in which this type of technique has been employed, the utilization of the reality situation was of such character that she could formulate no subjectively adequate responses. This resulted in an increasing need to make some kind of a response. As this desire increased, an opportunity for response was presented to her in a form rendered *inherently appropriate and effective by the total situation*. Thus, the very nature of the total situation was utilized in the technique of induction.

To summarize, a number of differing special techniques of hypnotic trance induction are reported and illustrated by clinical and experimental examples. These methods are based upon the utilization of the subject's own attitudes, thinking, feeling, and behavior, as well as variously employed aspects of the reality situation as the essential components of the trance induction procedure. In this way, they differ from the more commonly used hypnotic techniques which are based upon the suggestion to the subject of some form of operator-selected responsive behavior. These special techniques, while readily adaptable to subjects in general, demonstrate particularly the applicability of hypnosis under various conditions of stress and to subjects seemingly not amenable to its use. They also serve to illustrate some of the fundamental psychological principles underlying hypnosis and its induction.

A Transcript of a Trance Induction with Commentary*

THE ART OF OFFERING hypnotic suggestions in such fashion that the subject can accept them and then respond to them is difficult to explain. As an approach to this involved task, the following exposition of a trance induction is offered to clarify in some ways how suggestions are offered, presumably why they are effective, the methods that may be utilized to integrate one suggestion with others and to incorporate various responses into others, and to demonstrate the readiness with which communication with a subject can be established at various levels, both separate and distinct as well as interrelated.

The situation and procedure are given in the full detail afforded by tape recordings, together with a brief explanatory introduction, with only that editing requisite to make the conversational situation intelligible to the reader.

One evening in 1957 Milton H. Erickson hypnotized a subject during a weekly seminar he conducted in Phoenix. This trance induction was recorded. The following day he listened to the recording and discussed the induction with Jay Haley and John Weakland. This conversation was also recorded. What follows is a verbatim transcript of the two recordings: the trance induction recording is presented in the first column; the conversation about the trance induction (as the initial tape is played back) is given in the second.

The hypnotic subject, who will be called Sue here, was not entirely a naive hypnotic subject. A stage hypnotist had tried to hypnotize her and rejected her, giving her the idea that she was a poor hypnotic subject. Dr. Erickson reports, "I met her for the first time at Dr. M's. I looked her over and nodded to Dr. M that she would make a good subject, and I indicated that later I wanted Dr. M to work on her. This was done by signals that Sue could not see. I went ahead on this occasion to work with another subject, and then I asked Sue to sit down in a chair beside me. I asked her if she'd like to be hypnotized, and she said, 'Yes, but I'm not a good subject.' I told her I thought she was a very good subject. I took hold of her arm and tested it for catalepsy. At the same time I tried to get some eye fixation. There was a fairly responsive eye fixation, then she shook her head and said, 'I don't think I can be hypnotized.' I asked her if she wanted Dr. M to work on her, and she did, so Doctor M had her look at the reflection of the light on the doorknob. Dr. M worked quite hard with her and produced practically no results. There was closing of the eyelids, but no catalepsy, no hand levitation, and rather restless behavior. When Dr. M told her to rouse up, she explained that she wasn't so sure she went into a trance, but that she had tried very hard to cooperate. Perhaps she 'cooperated too hard.' She didn't think she would make a good subject, even though Dr. Erickson said she would. She thought that perhaps I had made a mistake. The next time hypnosis was attempted was in her home. I had two good subjects there, and Sue really watched both of them. She was the hostess and

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was answering the telephone and worrying about the children making a noise. She said, 'I'd like to be hypnotized, but I'm afraid I can't be.' I asked her to sit down and be a subject. She sat down, I tried to hypnotize her, she was restless and said, 'I can't be hypnotized, I'm no good as a subject. I'm really not listening to you. I don't think I could be a subject, but I'd really like to be one.' That was the second effort. The recording constitutes the third attempt."

Before beginning his induction that evening, Erickson purposely arranged the seating of the people in the room. A short time later he re-arranged the seating, having Sue move each time. His later comment on this was, "I put her in the chair that I later sat in, then I shifted her to the couch. I was in her place. And she had obeyed me by shifting to the couch. She'd put me in her place, with all its subtle implications. If there had been some other chair there, even if it had been more convenient to sit in it, I would have sat in her chair. The shifting prior to that implied that if there is prior shifting, there can be subsequent shifting. I introduced the idea of shifting earlier to make it completely acceptable. Then there is no chance that she is going to resist the shift." He also pointed out that on the couch Sue sat in a position where a good subject had been sitting.

The transcript of the recording of the comments on the induction, and the induction itself, follows:

Induction	Comment
	<p><i>H:</i> Before we begin I wonder if you might comment on how you knew Sue was a good subject. How do you tell that a person is going to be a good subject?</p> <p><i>E:</i> When you see a person who shows decidedly responsive behavior. For example, John is introduced to you. You see him making up his mind, 'So I'll shake hands, and I will say such and such,' worrying about details of the introduction. That's the kind of personality that's very difficult. But if you see a person being introduced, and he looks expectantly toward the other person, he shows responsive behavior and natural behavior. When I visited Dr. M and was introduced to Sue, there was that completely responsive behavior. She was perfectly willing to respond, 'How do you do, Dr. Erickson,' perfectly willing to shake hands. She was waiting for cues, waiting to meet what I did. I watched her being introduced to other people, men and women. That complete responsiveness of her behavior, that's one way you can pick out a good subject. And she is that type.</p> <p><i>W:</i> What do you think made it difficult for her to be hypnotized the first two times?</p> <p><i>E:</i> She hadn't made up her mind about it. Her husband had raised the question with her previously, and she discounted him. She knew that he wasn't experienced. She hadn't met me, and this stage hypnotist certainly did not make a good impression on her. It was still an open question. Let's wait and see what the behavior is like, then I can respond.—That was her attitude.</p> <p><i>E:</i> I think, Sue, it's time for you to go into a trance.</p> <p><i>S:</i> O.K.</p> <p><i>E:</i> You aren't at home. That's a nice</p> <p><i>W:</i> You've already made it different from the last time.</p> <p><i>H:</i> You didn't seem to want her to respond to that last question. You</p>

Induction	Comment
couch. Now I wonder what some of the things are that you'd like to experience in a deep trance.	said, 'I wonder what some of the things are,' but you didn't pose it as a question that she should answer. Is it just something that you wanted her to think about?
[Fluttering of eyelids.]	E: You open the question, bring about a readiness to respond, and inhibit the response, you postpone the response until later.
	H: It increases the later response if you open one up and then inhibit it?
E: You're in a responding position.	E: You're in a responding position.
	W: I think maybe it's particularly appropriate here, partly because she has had the uncertainty about responding.
	E: You're emphasizing the fact that she's going to respond, that she's all set to respond.
E: And slowly go deeper and deeper. [Long pause.] As you go deeper and deeper asleep, you can free your hands, separate them. And let them slightly, slowly, gradually begin to lift involuntarily. Lifting just a little.	W: We can comment here on that. You say lifting just a little. I'm not sure whether you see a very, very minimal lifting or what, but I noticed that you certainly take—I'm not sure whether you took no response as a response, or the tiniest response and said, 'It's lifting.' There were a number of times there when you said it when I couldn't quite detect whether anything was happening or not.
	E: There was one thing that happened. Put your hand on your thigh, take a deep breath. What happened to your hand?
	W: It lifts!
	E: You time the inspiration. And they haven't got an opportunity to deny it. . . . Later on I thought I would emphasize that, by taking every other inspiration to say 'lifting.'
	H: Every other one?
	E: Yes.
	W: There's a little more going on than meets the eye!
	H: I hadn't noticed the inspirations in this at all.
	E: Nobody notices inspiration and expiration. They're used to that.
	H: Were her lids closing at that moment? It seems to me usually you say, 'Your lids will begin to close.' You put it in the future. I noticed that you used 'are' there, the present.
	E: A very slight quiver of the lids. They <i>are</i> closing.
	H: O.K.
	E: A rising inflection. Lifting [demonstrating voice rising as he says it.] And I think you probably noticed the . . . 'lifting'.
	H: The movement of the body, too.
E: And your hand lifting just a bit more. Lifting. Lifting. Lifting a bit. Forefingers moving Moving just a little bit. Lifting, lifting again. And then the next finger will lift. The whole hand is	E: The movement of my body. And of your own unconscious localization of the sound. [Demonstrating exaggeratedly as he straightens up.] Lifting. And the conveyance of the change of location. But you never pay attention to the location of sounds consciously; you accept them.

Induction	Comment
<p>stiff, lifting. Lifting. Lifting up. Lifting, lifting, lifting up.</p>	<p><i>H:</i> Was the elbow bending? <i>E:</i> A slight quiver of the biceps.</p>
<p><i>E:</i> The whole arm lifting slowly—lift- ing—lifting a bit more. And lifting. [Pause.] Lifting. Lifting a bit more. The elbow is bend- ing.</p>	<p><i>E:</i> The tendency there was for me to say 'Lifting a bit more, lifting a bit more, lifting a bit more.' The different volume in my voice. <i>H:</i> Raising the volume? <i>E:</i> Raising the volume. And you only raise the volume when it's <i>really</i> happening. Same words, but a different volume in the words. And you throw in that change of volume.</p>
<p><i>E:</i> The elbow is lifting. The hand is lifting — lifting more and more. [The hand has lifted slightly. Long pause.] Now I want you to go deeper and deeper asleep. And to signify that you will, I want your head to nod forward <i>slowly</i>.</p>	<p><i>W:</i> There are so many levels on which the suggestive effect can be paralleled. Instead of being different levels of message contradicting each other, this is where they reinforce.</p>
<p><i>E:</i> [Pause.] Slowly nodding forward, still more — still more. [Pause.]</p>	<p><i>H:</i> It certainly nodded slowly. <i>W:</i> By saying 'slowly' or 'just a little' or something like that, when the subject is only responding minimally anyway . . . <i>E:</i> You are accepting their minimal performance, and it's good. <i>W:</i> And you're avoiding asking for something more than you're likely to get at the moment.</p>
<p><i>E:</i> You're content with what you're receiving, and they know it. And since you <i>are</i> content, they <i>must</i> be responding. It's fallacious, I know. And you'd rather they'd keep on being slower and <i>slower</i>. 'Just a little bit more.' How small is a little? But it <i>is</i> more.</p>	
<p><i>E:</i> [Pause.] Slowly nodding forward, still more — still more. [Pause.]</p> <p><i>E:</i> And still more. [Pause.] And you can go deeper and deeper asleep. [Pause.] And I want you to go deeper and deeper asleep.</p> <p><i>E:</i> And, I'm going to count for <i>you</i>. One . . .</p>	<p><i>E:</i> A lapse of time demonstrates that it <i>has moved</i> forward. [Fallacious but subjectively convincing.]</p> <p><i>W:</i> You shift there from 'you can go deeper asleep,' which is certainly a reasonable statement from the depth she is in at that point. And then 'I want you to go deeper.'</p> <p><i>E:</i> You <i>can</i>, and I want you to—and we've joined forces.</p> <p><i>H:</i> Has she ever heard this count to 20 before?</p> <p><i>E:</i> Yes.</p> <p><i>H:</i> If she had never heard it before, would you have had to say . . .</p> <p><i>E:</i> I would have explained it to her.</p>

Induction	Comment
	<p>H: That when you reached 20 she'd be deeply asleep.</p>
	<p>E: But she'd heard it before; she'd seen it used before. She already knew what counting meant. She knew what counting meant in relationship to a good subject. And she saw a good subject respond to the count. And so when I started counting for <i>her</i>, she had to bring up all her previous knowledge, all her previous understanding, but that was hers.</p>
	<p>W: It makes it . . .</p>
	<p>E: All the more accepted.</p>
	<p>W: It makes it more if you don't explain it. I mean, if you explain it, that implies that you've got to emphasize it, whereas if you don't explain it that implies she already knows.</p>
	<p>H: She's got to volunteer the understanding, yes. Well, what would you do with a naive subject who'd never heard a count before? How would you phrase that?</p>
	<p>E: Then I'd explain how I could count from 1 to 20, and at 5 a quarter asleep, and so on.</p>
	<p>H: But I was interested in the preliminaries. I was not sure whether you'd explained first, or whether you counted to 5 and then said a quarter asleep and let them figure out that if 5 is a quarter asleep, 10 must be half, 15 three quarters, and 20 the full count.</p>
	<p>E: It depends upon the intelligence of the subject and the readiness at grasping it. Some people even with college degrees can't understand what you mean when you say you can count to 20 by ones, or twos, that you're also telling them you can count by fours, fives. So you have to be rather elaborate. Some you can tell 'I can count to 20 in various ways,' and they think—'by ones, twos, by fours and fives.'</p>
	<p>H: Is it more effective if they figure it out?</p>
	<p>E: More effective, because they're taking the ball and carrying it.</p>
	<p>H: So really the minimum explanation you can get by with, the better.</p>
	<p>E: The more participation you can get from them, the better.</p>
<p>E: . . . 2, 3, 4, 5, 6, 7, 8, 9, 10 — and half asleep — 11, 12, 13, 14, 15 — three quarters asleep — 16, 17, 18, 19, 20, and take a deep breath and go way deep sound asleep. Way deep sound asleep.</p>	<p>H: And you suggested the deep breath by taking one yourself.</p>
	<p>E: The very way [demonstrating with varying pauses and inflections] that I say, '16, 17, 18, 19, 20, now take a deep breath.' [Exhaling on 19 and 20, air gone when he says 'now take a deep breath.']}</p>
	<p>W: You need one by the time you get there.</p>
	<p>E: The rise in force.</p>
	<p>H: You rise in force and drop when you say 'go to sleep.'</p>
<p>E: . . . way deep sound asleep. And I want you to be sleeping sounder and sounder all the time. Sounder and sounder. Now there are certain things</p>	

Induction	Comment
that you want to learn.	<p><i>E:</i> There are <i>certain</i> things—that you want to learn. Completely specific and so general.</p> <p><i>H:</i> And you had nothing in particular in mind at that moment that she wanted to learn?</p> <p><i>E:</i> The development of the evening would single out the 'certain things.' But it sounds so specific, yet really it is so general.</p>
<p><i>E:</i> And I want you to be sure that you'll learn and I want you to think clearly in your own mind of all the various things you <i>want</i> to learn. And then I want you to realize that you <i>can</i> learn them, and that you <i>will</i> learn them.</p> <p>[Long pause.]</p> <p><i>E:</i> And go <i>still</i> deeper. Still deeper asleep. [Pause.] And now, Sue, I'm going shortly to awaken you. And there are certain things that I want you to do. And I really <i>want</i> you to do them.</p>	<p><i>E:</i> That you <i>can</i>, that you <i>will</i>.</p> <p><i>W:</i> And you want her to realize this, which implies, of course, it is absolutely so and all she has to do is realize that it is so.</p> <p><i>E:</i> And she's obligated in all directions. She's having time to realize.</p>
	<p><i>H:</i> At this point you had already lifted her arms. Now when you lifted her left hand—as I remember, she hadn't levitated at all prior to that.</p> <p><i>E:</i> Just fluttered the arm.</p> <p><i>H:</i> Yes. When you lifted her left arm, you put it in a position where it would remain very easily, even if she were awake. You established that, and then you lifted the right arm into a position that required more catalepsy.</p> <p><i>E:</i> That is, I established <i>easy</i> catalepsy, a very convincing experience subjectively. And it's really so. Therefore, it's so on the other side.</p> <p><i>H:</i> Why couldn't you have worked further to get levitation for her?</p> <p><i>E:</i> In ordinary life, she's rather quick and active. When she relaxes, she's slow. It takes too much time.</p> <p><i>H:</i> When you say in this last piece, 'I really want you to do it,' now this is related to something that interests us. How you use her concern about <i>you</i>.</p> <p><i>W:</i> Isn't it also a little more than that, as I heard it, a little bit, it's 'I really <i>want</i> you—to do that.'</p> <p><i>E:</i> You want to learn certain things, I really <i>want</i> you to. She's already had a suggestion that 'there are certain things you <i>want</i> to learn.'</p> <p><i>H:</i> But was this a second suggestion on how there are certain things she was going to do?</p> <p><i>E:</i> The background was: There are certain things that she wants to learn. I'm the teacher, therefore I really want her to do these things because I, as the teacher can help her to learn the things that she really wants to learn. So it becomes a cooperative venture.</p> <p><i>H:</i> Well, it's cooperative, but it's using her concern about you to a great extent.</p>

Induction	Comment
<i>E:</i> . . . and you may enjoy doing them.	<i>E:</i> She wants me to be the teacher. <i>H:</i> Why do you use the word 'may' there? Doesn't that pose the problem 'you may not' when you use 'may' instead of 'will'?
<i>E:</i> After you are awakened, Sue, I want you to tell me that you weren't <i>really</i> in a trance. And I want you to believe it.	<i>E:</i> I'd just told her 'I want you to do this.' That's awfully dictatorial. Let's contrast it with permissiveness. 'You <i>may</i> enjoy doing this.' So I've stepped from my completely dictatorial to a permissive role.
<i>E:</i> And I want you to be emphatic in your statement. Quite emphatic. And you will be, will you not? [Pause.] And whatever else you need to do you will do, will you not?	<i>H:</i> Did you assume she would do that anyhow? <i>E:</i> There's a good possibility. So whatever negative thing she has said will really be a positive thing. <i>H:</i> You put a frame around it.
<i>E:</i> [Pause.] And after you are awakened, you will <i>not</i> believe that you were in a trance. You'll be emphatic in your belief; you'll be polite about it. But you will know that you were <i>not</i> in a trance.	<i>H:</i> What did you have in mind there? <i>E:</i> Whatever else you need to do, you really will do. <i>W:</i> Isn't that also in a way an amnesia suggestion? <i>E:</i> Essentially. <i>W:</i> So you take her tendency to produce denial and produce a phenomenon with it.
<i>E:</i> And now I'm going to awaken you, Sue. And I'll awaken you. [Pause.] I'll awaken you by counting backwards from 20	<i>E:</i> With it. And I say ' <i>emphatic</i> ', and my enunciation of the word ' <i>emphatic</i> ' is also emphatic. 'But you'll be polite about it.' And there again, 'you'll be polite about it' intensifies the need to deny, because she is going to be polite, she's under tremendous compulsion, cultural compulsion, to be polite. But the situation has been created in which she's got to be polite about a certain thing. She's under compulsion to be polite. That requires her to deny that she was in a trance. <i>H:</i> She's under compulsion to be polite about something she feels emphatically about. <i>E:</i> Yes. But she's also under compulsion to be polite. And there's only one thing in that situation, and so she has to be polite about it, thereby validating the existence of that one thing.

Induction	Comment
<p>to 1, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1—awaken. Do you feel a bit tired, Sue? [Sue clears throat.] Do you think I'm right in thinking you're a good hypnotic subject. [She shakes her head.] You don't.</p>	
<p>S: I sure try.</p>	<p>E: Notice the change in my voice to fit a casual, social scene.</p>
<p>E: You surely do. How many times do you think we'll have to try?</p>	<p>H: Is her statement 'I hope it won't be long' also a statement 'I hope I won't have to deny this very long'?</p>
<p>S: Oh, I hope it won't be long [L a u g h i n g slightly.]</p>	
<p>E: [Joining laugh.] Yes, I hope it won't be long until I get that fly. [He holds the fly swatter. Be- fore trance he and subject had been pursuing a fly.]</p>	<p>E: That may be, but I'm really switching away from the trance with that fly.</p>
<p>S: Didn't you get him yet?</p>	<p>H: You surely are.</p>
<p>E: No.</p>	<p>E: And she's joining me in that fly business.</p>
<p>S: Oh, my!</p>	<p>W: You switch away from it, that makes easier the belief that it didn't happen.</p>
<p>E: That's right.</p>	<p>H: Do you think she had amnesia for it then?</p>
<p>E: I don't know. But we really got on the subject of the fly, and she could really join me, so we could share something in common.</p>	<p>E: We could really be two against that adverse crowd.</p>
<p>H: She sounded very girlish when she joined you.</p>	<p>W: Yes.</p>
<p>E: We could really be two against that adverse crowd.</p>	<p>E: The others didn't really approve of us, but we two were kindred souls in the absurd pursuit of the fly.</p>
<p>H: You established that earlier, as I remember.</p>	<p>W: It just struck me that you brought up the question of time here, and then you brought it up later about how long she would feel—how much time had passed—was this a set-up?</p>
<p>[Inaudible com- ments from others present about flies.]</p>	
<p>E: Have you any idea what time it is?</p>	<p>E: Yes, that is, I had a whole lot of set-ups. Here, there, everywhere. Knowing that I could not use all the set-ups, but I would be certain to</p>
<p>S: No.</p>	
<p>E: Five minutes of eight.</p>	

Induction	Comment
<p>S: Really?</p> <p>E: Maybe you've been asleep.</p> <p>S: I don't think so.</p> <p>E: Sure about that?</p> <p>S: Pretty sure.</p> <p>E: You know, there's an astonishing phrase in the language?</p> <p>S: Yes?</p> <p>E: For a complete dinner, we speak of it as everything from soup to nuts, do we not?</p> <p>S: Yes.</p> <p>E: And you really <i>understand</i> what that means, don't you? Soup to nuts. And then, let's see, there's another phrase, everything from A to Z. It's pretty conclusive, isn't it? And inclusive. And you really <i>understand</i> what A to Z means.</p> <p>E: And then you can vary the phrase. Everything from 1 to 20. [Pause.] From 1 to 20 and . . . take a deep breath. Go way deep asleep. [Pause.]</p> <p>E: That's right. And you can really do it, can't you? [Pause.] And you can, can't you?</p> <p>E: And you really</p>	<p>use some of them. Not knowing what will develop, better have plenty of set-ups that you can use. A multitude of preliminary suggestions offers an opportunity for subsequent selection and use.</p> <p>H: She wasn't emphatic there.</p> <p>E: 'Understand' is the word. And all I'm telling her is to prepare herself to <i>understand</i>. It's a distraction, the soup to nuts, A to Z, <i>understand</i>.</p> <p>H: Is that just a distraction, or is that a statement that there's going to be a completion, from soup to nuts, from A to Z, from 1 to 20?</p> <p>E: Yes, soup to nuts tells her the type of understanding. But she can start thinking about soup-nuts, A-Z, but <i>understand</i> puts it back . . .</p> <p>H: One question comes up here. I notice that you repeat that 'everything from 1 to 20' twice. Sometimes you repeat things, and sometimes you just drop them casually, saying it once. I wonder why it's necessary to repeat it.</p> <p>E: Well, I wanted her to go deeply into a trance.</p> <p>H: And repetition does that.</p> <p>E: Yes.</p> <p>E: Always match your positives to your negatives. 'And you <i>can</i> . . .' If they're going to say 'can't,' better anticipate them.</p> <p>H: I see. So that when you say, 'And you <i>can</i>,' they don't think 'but I can't.'</p> <p>E: I've beaten them to it. I've said they can't, it's been said, they don't need to say it, therefore, not being able to say it, they can't act upon it. And the use of that 'can't you' has a positive effect. 'And you <i>can</i>, can't you?' You've got a negative positively stated; it prevents them from saying 'I can't.'</p> <p>H: Is it the same with 'And you <i>will</i>, won't you?'</p> <p>E: Yes.</p>

Induction	Comment
<p>can. You can nod your head. [Pause.] It rather surprised you, didn't it?</p> <p>E: [Long pause.] After you are awakened again, Sue, — and I ask you about going into a trance, I want you to tell me that you weren't asleep the second time, that you were the first time. And you're most insistent on that, and you will repeat that, Sue, will you not?</p>	<p>H: Did you pick that up from her, or just assume it?</p> <p>E: It did surprise her.</p> <p>H: How did you know?</p> <p>E: She was thinking 'soup to nuts,' A to Z, 1 to 20. And then surprised that soup to nuts, A to Z, could also be 1 to 20.</p> <p>H: Then you assumed the surprise, you didn't see from her expression that she was surprised.</p> <p>E: From the suddenness of her reaction to it, you can legitimately deduce surprise. I don't recall that I saw any particular expression of surprise.</p> <p>H: I just remember wondering at the time whether you were seeing something I wasn't seeing or whether you just assumed it.</p>
	<p>W: Now by changing your 'no' to the second one, you begin to get your acceptance catching up as you go along?</p> <p>E: Yes. First I had her deny the first trance. Now I'm nullifying that denial.</p> <p>W: By giving her another 'no' to work on in the meantime.</p> <p>E: And in order to work on the second negation, she's got to affirm the first.</p> <p>H: A use of double binds!</p> <p>E: What else can she do?</p> <p>W: Well, one might approach that question by saying, 'Suppose someone said that to you, what would you do?'</p> <p>E: Every manipulator works it on that basis, too.</p> <p>H: Well, when you get two like that, it does put her in a position where she has to affirm one of them in order to deny the other, yes.</p> <p>E: In order to deny one of them, she has to affirm the other. The affirmation of one of them is the means of denying the other.</p> <p>H: That's a classic double bind you've got there.</p> <p>W: And why can't she see it, or comment on it?</p> <p>E: In other words, why doesn't she say, I wasn't asleep either time.' We're talking about two separate trances. (They were compartmentalized.)</p> <p>H: She couldn't comment on both with one word like 'either,' you mean.</p>

Induction	Comment
<p><i>E:</i> And now, I'm going to awaken you. I'm going to count backwards from 20 to 1. 20, 15, 10—half awake—and 5, and 4, and 2, 3, 4, and 5, and 6, 7, 8, 9, 10—half asleep—and 9 and 8 and 7 and 6, 5, 4, 3 [slight pause], 2, 1. Wake up.</p>	<p><i>E:</i> That's right.</p>
	<p><i>W:</i> Did you pause there to emphasize that the 2 was coming up again? It seemed as if you got down to 3, and just before the 2, that was the reversal point.</p>
	<p><i>E:</i> Just a wee bit louder.</p>
	<p><i>H:</i> What effect does it have when you give her the rough bounce but only up to 10?</p>
	<p><i>E:</i> 'I can put you in any level of trance.' And simply, and easily, and comfortably. And she is going to know that I said '4, 2—3, 4.' Perhaps I said that 3 to correct myself. I shouldn't have skipped 3. I really shouldn't have, supposedly. And it's good that I said: 4, 5, 6. And then the goodness relates to going back into the trance.</p>
<p><i>E:</i> Thirsty.</p> <p><i>S:</i> Yes.</p> <p><i>E:</i> Be horrible if you could not pick up that glass of water, wouldn't it, Sue?</p> <p><i>S:</i> Yes.</p>	<p><i>H:</i> That's the soft bounce.</p> <p><i>H:</i> O.K. What about that?</p> <p><i>W:</i> Yes, how did all of that work?</p> <p><i>E:</i> She awakened with an eager look, the wetting of her lips, and 'be horrible [after a pause] if you couldn't pick up a glass of water.'</p> <p><i>H:</i> Is 'be horrible,' then a statement about her feelings of thirst?</p> <p><i>E:</i> Yes. What I said was 'be horrible if you couldn't get that drink,' I also said <i>be horrible</i>. <i>Be</i>, the verb <i>to be</i>. It was a command.</p> <p><i>H:</i> You were commanding her to be horrible.</p> <p><i>E:</i> Yes.</p> <p><i>H:</i> Now how does that keep her from reaching for a glass of water?</p> <p><i>E:</i> That's comforting, that's pleasing, that not horrible. And it would be horrible if she couldn't get that glass of water.</p> <p><i>H:</i> It would be the same if you said 'be uncomfortable.' You would be uncomfortable if you couldn't reach for that glass of water.'</p> <p><i>E:</i> 'It would be uncomfortable if you couldn't reach that glass of water.' But 'it would' be uncomfortable.</p> <p><i>H:</i> What did you say? [They listen again.]</p> <p><i>E:</i> There was no 'it would' there.</p> <p><i>H:</i> There certainly wasn't. Well, why did you choose 'be horrible?'</p> <p><i>E:</i> Because she was licking her lips. You don't say 'uncomfortable,' you use a stronger word.</p> <p><i>H:</i> Well, why did she obey that suggestion if she were awake?</p> <p><i>E:</i> Because I had first said 'thirsty.' Listen to the way I said 'thirsty.' [The tape is replayed.]</p>

Induction	Comment
	<i>H:</i> Not a question, you mean. You mean it doesn't have a question inflection?
	<i>E:</i> It's also a command. 'Thirsty.'
	<i>H:</i> Well, did that command put her back in trance?
	<i>E:</i> What is she going to be in, 'thirsty'? 'Thirsty!' Is it a question, is it a command, just what is it? When the later statement is made, 'thirsty' becomes a command.
	<i>H:</i> What I am trying to get clear is whether you awakened her, when you said 'wake up.'
	<i>E:</i> Yes.
	<i>H:</i> And then 'thirsty' put her back in trance?
	<i>E:</i> The 'thirsty' arrested her behavior. Just what did I mean? Was it an inquiry; was it a command? Just what was it?
	<i>H:</i> And then 'be horrible' did what?
	<i>E:</i> It was a command.
	<i>W:</i> This might be a place where we could raise the general question: In an induction like this, how much do you simply do these things and how much do you do A, B, C, D, E, F, G? As we speak over the moves now, we can, in a sense, pick out and identify so many things as such. Are we identifying more than went through your mind when you were doing it? I mean, did you do it as consciously as you describe it to us now?
	<i>E:</i> Well, you see, I noticed that licking of her lips, the directing of her glance, her general body movements. I couldn't know whether I wanted her to drink, whether I wanted to suggest that she drink, or what I would do. So I threw in that word, where neither she nor I really knew the interpretation. And having thrown it in, then I had enough time to say, 'I will now use that word,' but it was a nondescript usage, it wasn't a question.
	<i>W:</i> It was a nondescript but specific response to what she had just done.
	<i>E:</i> Yes, but it was a nondescript utterance of the word. Neither a question nor a command, really an observation of a state of some kind, which gave me time to decide how to use it.
	<i>H:</i> Now when you said 'be horrible if you couldn't pick up that glass,' did she then go into trance? And she had been awake a moment before.
	<i>E:</i> Yes.
	<i>H:</i> Just the fact that you had given her a command put her in trance?
	<i>E:</i> Yes.
	<i>W:</i> I wonder if there was a partial thing there. I had the feeling watching it that it was as if she didn't dare test that one out to the limit. Now when I hear the 'be horrible', it's almost as if 'well, it's bad if I don't get it, but if I tried real hard to get it, and couldn't get it, then that would really be horrible.'
	<i>E:</i> That might be.
	<i>H:</i> Now this is another example. In the inductions I've watched you do, in each one there is a kind of a challenge to the subject to try something which they find they can't do. Do you try to set this up for each induction?
	<i>E:</i> Yes. And repeatedly throughout the evening I use that.
	<i>H:</i> That's the only example I can think of.
	<i>E:</i> We'll probably run across more.

Induction	Comment
<p>S: [Laughing slightly.] I can't.</p> <p>E: What's that?</p> <p>S: I can't.</p> <p>E: You're getting thirsty.</p> <p>S: I'm always thirsty.</p> <p>E: You must have been in a trance.</p> <p>S: Not really.</p> <p>E: Not really?</p> <p>S: No, no. I think you'd better work on your wife, or F.</p> <p>S: Yes.</p> <p>S: I really do. Because maybe I'll get better from watching them.</p> <p>E: Can you pick up that glass of water?</p> <p>S: [Pause.] I don't think so.</p> <p>E: What?</p> <p>S: I don't think so.</p> <p>E: You must have been in a trance. It seems to me as if you're acting as if you had a post-hypnotic suggestion. Could be you were in a trance <i>one</i> of the times. Especially . . .</p> <p>S: [Interrupting.] Well, I think I [clears her throat] was deeper in the first time.</p>	<p>H: Was that 'I'm always thirsty' an agreement that she was following your suggestion while denying it? It's an acceptance that she was getting thirsty but also a statement 'I'm always getting thirsty, it isn't you.'</p> <p>W: Making it her own, in her own experience.</p> <p>H: But also partially denying that she was thirsty because you were saying so.</p> <p>E: It's relating it to herself.</p> <p>W: Doesn't she compromise again in a way a little bit with your suggestion to deny one, and instead of saying 'yes' and 'no', she says, 'Well, more than.'</p> <p>E: Because I raised the question 'are you still in a trance now?' when I raised the question whether she was under the influence of a post-hypnotic suggestion.</p> <p>H: Well, first she said you'd better work with somebody else, and you said 'can you reach for the glass of water?' and she couldn't—did she go back into trance at that moment? Or was she continuing?</p> <p>E: A vacillation up and down, in and out of a trance. Waiting for some kind of a cue from me to jell her state.</p> <p>H: I've often seen that kind of thing when somebody feels he's awake in a trance, and you ask him if he can reach for a glass of water.</p>

Induction	Comment
	Then he finds he can't, and he feels maybe he is in a trance. But I never saw it done when a person is awake. And you brought up the possibility of a post-hypnotic suggestion, was that to put a doubt in her mind about the trance? Whether she had received one she didn't know about?
<i>E:</i> By the way, when did you get the post-hypnotic suggestion about the glass of water?	<i>E:</i> To make her awfully uncertain as to her state of awareness. And if she's uncertain about her state of awareness, then she can rely upon me to clarify it.
<i>S:</i> I don't remember any.	<i>W:</i> It seems to me if she's uncertain she's got to rely on you to clarify it.
<i>E:</i> You don't remember. [Pause.] Did you go in deeper the first time? It seems to me that you told me you weren't in a trance the first time.	<i>E:</i> Yes, she's got to rely on me. Therefore she's got to do my suggestions.
<i>S:</i> Well [Pause], not like L. [A good subject she had seen in a trance].	
<i>E:</i> Yes?	
<i>E:</i> Maybe this last time you weren't in a trance.	<i>E:</i> Another item there that you will overlook is the fact in inducing a trance, you say 'I want you to go deeper asleep, still deeper,' a pause, 'still deeper,' a pause, and later in casual conversation I can ask you, 'Is your dress light [Pause] colored?' The pause itself can become a cue.
<i>S:</i> I'd love to say yes.	<i>W:</i> Could you use uncertainty in the tone of your voice if you wished to?
<i>E:</i> You really would? And you'd really love a drink of water, wouldn't you? It is nice to pick it up, isn't it?	<i>E:</i> Oh, yes. And you can often use anxiety in your tone of voice to achieve certain results.
	<i>H:</i> In our terms, the pause becomes a message then.
	<i>E:</i> A message interpreted in terms of the effect of previous pauses. The not saying of something that had conditioned her previously.
	<i>H:</i> Why did you point out to her that she had said before that she hadn't been asleep the first time?
	<i>E:</i> Forcing her to recognize that I can direct her attention. To have her agree to it, then to agree to do it. I have no hesitation at all in doing that.
	<i>H:</i> No hesitation about pointing out contradictions in what she says?
	<i>E:</i> That's right.
	<i>H:</i> Whereas she has hesitations about pointing out contradictions in what you say.
	<i>E:</i> I'm the secure one, she had better follow along.
	<i>W:</i> And this could also mean not only by your pointing out contradictions but also quite the opposite. I mean, you could be free to leave one without pointing it out, and get a similar result out of it. That is, you could say something contradictory yourself and go right ahead with it.
	<i>E:</i> I can't think of a particular instance in hypnosis, but some troops in training were caught in a bog and the officer lost his head, and the men were about to panic when one of the recruits said, 'This way, boys.' And he started off confidently. That was the end of the panic.

Induction	Comment
	<p><i>H</i>: He was secure. Over and over in battle this sort of thing would happen. Someone suddenly assumed an attitude of security in certain situations.</p>
	<p><i>H</i>: Is that why you once said it would bother the subject who was put into the stage trance if you could arouse anxiety in the hypnotist's voice?</p>
<i>E</i> : Yes.	
	<p><i>H</i>: It's that important, that there be no anxiety in the hypnotist's voice.</p>
	<p><i>E</i>: That's right. In seminarians in practice sessions their anxiety in their own voice is detected by their fellow seminarians acting as subjects. Over and over again they will say I was going into a trance very satisfactorily until you got uncertainty in the tone of your voice.</p>
	<p><i>W</i>: You've now given her the nice experience.</p>
<i>E</i> : It is nice to pick it up, isn't it?	
[Long pause.] Isn't it? [Pause.] Just watch your hand. See what it does.	
There's your hand going to the glass. Watch it. It's moving to the left a little. [Pause.] Is it moving toward the glass?	
<i>S</i> : A little bit.	
<i>E</i> : Watch it, your hand moving.	
<i>E</i> : All that suffering for so small a sip? Don't you think you had better take another sip? [Long silence, during which <i>E</i> holds out his hand before Sue, and slowly closes his five fingers into a fist; then again, four times in all. Sue watches intently.]	
<i>E</i> : And now you're beginning to know that you can sleep like L, aren't you. Beginning to know. [Silence and long pause.] And you can close your eyes and go really deeply asleep, with a deep breath. A deep	
<i>H</i> : Now was that all to wait for your permission to reach for the glass?	
<i>E</i> : To initiate the move.	
<i>H</i> : Waiting for <i>you</i> to initiate the move.	
<i>E</i> : And for her . . .	
<i>H</i> : Oh, for <i>her</i> to initiate it and <i>you</i> to approve it?	
<i>E</i> : Yes.	
<i>H</i> : Because once you asked if it was moving toward the glass, then she did this movement and she reached for it.	
<i>E</i> : All right, she took a sip because she was thirsty. It was such a small sip. Then I had her take another. I was really generous, wasn't I? For one additional sip of water, I've got a lot of credit for generosity.	
<i>H</i> : And how that situation gets set up! Where a small sip of water becomes that loaded as far as your generosity goes.	
<i>W</i> : That's because there could be no sip at all. And all this is going on in the first 20 minutes.	

Induction	Comment
<p>breath, and go really deep asleep. That's right. Deeply asleep. [Pause.] I'm going to talk to the others, but you just keep right on sleeping. And I want you to be interested in the fact that you can see my hand, too. [To others.] That answers your question about the communication of ideas, doesn't it?</p>	<p>H: Did you tell her then that while you turned and talked to the others she could see your hand? Weren't her eyes closed at that moment?</p> <p>E: She could continue to see my hand, whether her eyes were open or closed.</p> <p>H: That was the first move toward an hallucination then.</p>
<p>E: [Pause.] And sleeping deeply, Sue. And this time when you awaken, I want you to recall how you went to sleep this last time, and try to explain it to the group. 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. And wake up.</p>	<p>E: I gave her a post-hypnotic suggestion that she was to explain to the group how she went to sleep, what caused her to go to sleep. As surely as she could explain this, she is really ratifying very thoroughly the fact that she was in a trance. She's confirmed it, she's ratifying it, she's making it a matter of public explanation, she's making an utterly definitive statement, explaining to an interested group, a respectful group, and thereby ratifying her own experience.</p> <p>H: You put the question and then put in the 20 so fast there, as if they were related.</p> <p>E: That was separating them.</p>
	<p>W: Isn't it also true that you give a post-hypnotic suggestion which you then—both you and the group—help her to carry out, because the suggestion is about something that you're going to be likely talking about as soon as you wake her up anyway? It seems to me this is the type of suggestion you could get more or less carried out in a light trance because it doesn't appear so much as a suggestion, that is, it doesn't appear set off from other things, it flows naturally into the discussion that comes up any way.</p>
	<p>E: Even with a light trance you ask them to explain how light the trance was. But they are ratifying that there was a trance.</p>
	<p>H: When you pose that post-hypnotic suggestion to her, in order to discuss it as soon as she awakens, she has to either go back in a trance or still be in a trance, doesn't she? I mean, you're not really awakening her.</p>
	<p>E: Not really awakening her fully.</p>
<p>E: How did you happen to go to sleep this last time, Sue?</p>	
<p>S: Watching your hand.</p>	<p>E: That whole explanation that she gave is informative. She watched my hand, the movement of it—those were her conscious reactions. She was not aware that she counted 20 unconsciously. There's that sharp differentiation. The counting, which occurred unconsciously, the conscious watching of the hand, the movement. That was her conscious response.</p>
<p>E: What did my hand do?</p>	
<p>S: It went like this [Opening and clos-</p>	

Induction	Comment
ing hand].	<i>H:</i> Do you have any idea why there was such an inhibition on knowing that she counted?
<i>E:</i> And what did you do?	<i>E:</i> Because counting belongs to the trance. Just as you give a post-hypnotic suggestion, 'whenever I put one cigarette package on top of the other, you'll go into a trance.' And then you say, 'Now this is much more than this.' [Putting one package on top of another after shuffling various objects on his desk.] And when you ask for an explanation later of what you did, the subject says, 'You picked up your case records and put them in order, you straightened up your schedule book, you moved the calendar, and I watched you.' Here is the thing that they didn't see completely [putting package on another]. They may say, 'You started to reach for your package of cigarettes, and first you did this, and this.' This [the package] is another thing; it belongs to the unconscious.
<i>S:</i> Just like this [Closes her eyes].	<i>W:</i> Well, is that the fact that the induction process—that is, when you have a general amnesia for the trance, it includes from the point at which induction really began, doesn't it? It is as if the induction were a part of the trance situation that is forgotten.
<i>E:</i> And what did it mean to you?	<i>E:</i> Yes. 'I sat down in the chair, you asked me to put my hands in my lap, and now half an hour has passed,' is a representative example.
<i>S:</i> [Pause] Hands clasped.	<i>H:</i> Another thing puzzles me. She says this as a post-hypnotic suggestion and therefore she can't have re-entered the trance to follow the suggestion. Yet she is giving her conscious description and not the number. So that, even in a trance, she doesn't know why.
<i>E:</i> Yes?	<i>E:</i> Yes, but you see, I didn't give her a number.
<i>S:</i> The movement, the flexing of the muscles. Just watched them.	<i>H:</i> You didn't?
	<i>E:</i> No, it was her interpretation. I didn't give her a number. She understood.
	<i>H:</i> She understood and didn't know she understood.
	<i>E:</i> That's right. But I didn't give her a number. All she saw me doing was flexing my fingers.
	<i>H:</i> Well, you didn't ask her what you did that put her in trance, you asked her why she went to sleep.
	<i>E:</i> Yes.
	<i>H:</i> And she didn't reply, 'Well, I interpreted that as the number 20.'
	<i>E:</i> No, because as soon as she interpreted it as 1 to 20—which is an instantaneous realization—it was all completed.
	<i>H:</i> And that was part of the trance. Did she have amnesia for that whole trance?
	<i>E:</i> Except that she really didn't know she was in a trance.
	<i>H:</i> Well, it's a peculiar thing. She didn't know that she was in a trance, she had amnesia for the trance, and yet she was trying to explain what put her in a trance.
	<i>E:</i> Yes, it was different levels of circumscribed awareness.
<i>S:</i> [The lights dim briefly.] Did everybody see that?	<i>W:</i> It gets pretty complicated in that one.
<i>E:</i> Yes, but what were you thinking? Why did you go to sleep?	<i>H:</i> It surely does.
<i>S:</i> [Pause, clearing throat.]	<i>H:</i> Why did you do it that way? <i>E:</i> It was in reply to her question, was it not?

Induction	Comment
<p>E: They have a deep freeze.</p> <p>S: What?</p> <p>E: They have a deep freeze.</p> <p>S: Who does? Oh, Bill [the host].</p> <p> </p> <p>S: Oh, that's what the light was. I see.</p> <p>E: [Pause.] What else were you thinking about as you watched my hand?</p> <p>S: Well, to me something like this [a fist] has always connoted strength. I couldn't tell you right off what was . . .</p> <p>E: Anything else?</p> <p>S: The breathing.</p> <p>E: Yes.</p> <p>S: The way your body breathed in and out, and I could feel myself breathing as you were.</p> <p>E: Now suppose you let your unconscious give me an answer. Now why . . .</p> <p>S: The closing of the eyes.</p> <p>E: Go to sleep. [Pause.]</p> <p>S: Because you wanted me to.</p> <p>E: When was the last time you went to sleep?</p> <p>S: Just now.</p>	<p>W: Yes, you didn't say it right away, but only after you asked her again about why she went to sleep.</p> <p>E: Yes, I started her on a train of thought about why she went to sleep. And then I offered an irrelevant observation about the deep freeze.</p> <p>H: She said 'Oh, Bill!' Why did you do that?</p> <p>E: To give you a contrast between the type of talking and tone of speech that she manifested while thinking about why she went to sleep. And I offered that observation in the same tone of voice that called for ordinary waking behavior and her voice demonstrated it so beautifully.</p> <p>H: It surely did.</p> <p>W: There's one other thing, too. At the same time, you then become the person who settled the question about the flicker.</p> <p>E: Oh, yes.</p> <p>H: And you also settled the question of what was going to be talked about.</p> <p> </p> <p>H: Did you time that to her breathing?</p> <p>E: I don't recall. I may have done so automatically.</p> <p> </p> <p>H: I wonder if that wasn't a real answer, 'because you wanted me to.'</p> <p>E: That's right. Now how did I teach her that I wanted her to? When I count from 1 to 20, that's the demonstration that I want her to go to sleep 'because you wanted me to.'</p> <p>H: And when you moved your hand, what you did was look at her very intently, and then you moved your hand. I mean, your looking at her</p>

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<p><i>E:</i> That's right.</p> <p><i>E:</i> What was I saying to you, Sue, when you went to sleep? [Long pause.] You're not really awake now, are you?</p> <p><i>S:</i> I don't think so.</p> <p><i>E:</i> You don't think so. You really don't think so, do you? And you really don't think you're awake. And if you don't think you're awake, you're beginning to think at the moment you're asleep. You're beginning to think and to know that you are asleep? You'll find that out as your eyes close. They are closing more. [Pause.] And more. [Pause.] And more. That's it. And sleeping deeply and soundly. Very soundly, very soundly. And you can smoke while you're asleep, Sue. Do you want to? Then I'll take your cigarette. [Long pause.] Now, Sue, I'm going to awaken you again. I'll tell you when to go to sleep, Sue, but you won't know it. I'll tell you when to go to sleep, but you</p>	<p>was also a statement 'I want you to go to sleep,' as well as moving the hand.</p> <p><i>E:</i> Looking at her meant, 'your attention, please.' [Demonstrates hand passing in front of his face to arm of chair and then flexing.] 'Your attention, please.'</p> <p><i>H:</i> Well, the only reason you really wanted her attention was to put her in the trance, wasn't it?</p> <p><i>E:</i> Yes, though I could get her attention by asking a question.</p>
	<p><i>W:</i> What strikes me here is that this is a remarkably late time now for you to say 'you're beginning to think.' Since you've been through two or three maneuvers on this before, the 'beginning' sort of stands out to me, and I wonder if that has a special significance.</p> <p><i>E:</i> No, it's just a matter of repetition. A good technique keeps referring back.</p> <p><i>E:</i> I can count her to sleep. I can tell her to go to sleep.</p>

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<i>won't know it.</i> But you'll go to sleep.	<i>E:</i> We may have to play it back to realize what I said to Sue. 'I will tell you when to go to sleep, but <i>you won't—know it.</i> ' <i>H:</i> The other kind of "no"—meaning you won't refuse? <i>E:</i> No. <i>H:</i> It sounds like that. <i>E:</i> 'But you won't-know it.' That's a double statement. It means you won't know when I tell you this, you just won't know it. And also it says 'know it' when I tell you to go to sleep. <i>W:</i> Separating it on two levels. <i>E:</i> Separating it on two levels. 'You <i>won't know it</i> , you <i>won't know it.</i> ' Meaning, you won't know it when I tell you to go to sleep— <i>know it</i> when I tell you to go to sleep. Play it back. [The tape is replayed.] <i>H:</i> It's very hard for me to tell the difference. <i>E:</i> They're much more acute than you are. [The tape is replayed.] <i>E:</i> You won't— <i>know it.</i> <i>H:</i> Well, is it the same on both those repetitions, or different. <i>E:</i> Essentially the same. <i>H:</i> Oh, I was trying to find the difference. <i>E:</i> They're both the same. There's a slight downward inflection on 'won't,' on 'know it,' a rising inflection, a slight rising inflection on 'know.' <i>H:</i> Yes, I see it now.
<i>E:</i> [Pause.] And you will want to, won't you, when I tell you to? Even though you don't know it. You will go to sleep, will you not? When I tell you to. Even though you don't know it.	<i>H:</i> Why did you follow that first series of 'don't know it' with 'you will,' and then you said, 'And you will, won't you? Meaning, 'You will know it, won't you?'
<i>E:</i> . . . And you're beginning to realize you can <i>sleep</i> , like L. And you can. And you're knowing it more and more, are you not? [Pause.] From 20 to 17 is 3—and 4 from that is 13—and 3 <i>more</i> makes 10 — you're half awake. And 9, and 8, and 7, 6, and 5, 4, 3, 2, 1. Wake up. Somewhere in the hassle you lost your cigarette. Would	<i>E:</i> Yes. <i>E:</i> Three from 20 is 17, 4 from that is 13, and 3 <i>more</i> is 10. <i>H:</i> Is that what you said then? [The tape is replayed.] <i>E:</i> I want to put addition in there. Because after that I'm going to start adding.

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<p>you like it? Mrs. C, this is Dr. and Mrs. Fingle. [Late arri- vals.]</p> <p>S: How do you do. My hand is so cold. This one. It's cold.</p> <p>E: Would you like your cigarette?</p> <p>S: Yes.</p> <p>E: Tell me, Sue, have you been in a trance.</p> <p>S: I think so.</p> <p>E: You think so.</p> <p>S: Yes.</p> <p>E: Are you awake now?</p> <p>S: I think so. I'm not sure.</p> <p>E: Well, Mr. Haley and Mr. Weakland are recording every- thing here. They want a discussion of this later. They'll probably use it in their research proj- ect.</p> <p>S: Fine.</p> <p>E: Shall we really fascinate 'em?</p> <p>S: [Low.] Yes.</p> <p>E: I have eight chil- dren.</p> <p>S: I know. I think it's marvelous.</p> <p>E: And then there's some who have a dozen. [Pause.]</p> <p>And you know now, don't you?</p>	<p>W: This is the hand from which you took the cigarette. That she com- ments on. This is odd. I wonder if there's a connection there.</p> <p>E: I think it was just a subjective observation.</p> <p>W: It struck me, because in taking away the cigarette you talked more about 'do you want to smoke' and finally she said a little 'no,' and you took the cigarette. And then you offered back the cigarette and so I wondered if there was any connection.</p> <p>E: I didn't follow that out at all.</p> <p>H: That's what you wanted the adding in there for!</p> <p>E: That's right. See how far in advance I planned that.</p> <p>W: Far ahead of me.</p> <p>E: I didn't know quite how to get that dozen in. But I was going to use addition. And '3 more is 10.' I had the concept of addition there, and I waited for an opportunity. I had laid my foundation for adding, first by obvious subtraction, and then by 'and 3 more—is 10.' Is that addition or subtraction? But the question of addition would neces- sarily arise.</p> <p>H: Do you think she would have reacted to the addition of 8 plus 12 if you hadn't put in the addition earlier?</p> <p>E: Well, when I was subtracting 3 from 20 and making it 17, I knew I was going to need addition. While I was getting 4 from 17, realizing I had to get addition in there somewhere, what could I make as a</p>

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	<p>casual statement so I could add something later to get 20? The first casual statement was the number of children I have. Now how would I verbalize '12?' Should I make it 'a dozen?' I thought at the last moment if I used 'dozen,' that would be '1, 2.' She would have to translate 'dozen' into 12—8 and 12 makes 20. So I made it the more involved 'dozen.'</p>
	<p>H: Well, what if you hadn't this addition in the counting earlier, do you think she would have gone into a trance on the basis of 8 plus a dozen?</p>
	<p>E: She might not. I wanted to insure it. I also wanted to show you how to plant suggestions.</p>
	<p>H: You showed us all right. Any particular reason for not bringing up the recorder and research earlier?</p>
	<p>E: She had been going into a trance, and earlier a mention of her being used for research might frighten her. It would remain an unanswered question. After she had been in a trance several times, then it was safe for me to bring it up because she had already been recorded, she was going to be used for research. If mentioned at first, it would be a threat, but now it's an accomplished fact she's going to be used for research, and it's obviously being continued, therefore it means her performance is valid.</p>
	<p>H: You employ odd mixtures of accomplished facts that turn into beneficial situations.</p>
<p>E: That's right. Close your eyes and go to sleep and 12 and 8 is 20, isn't it? Isn't that right?</p>	<p>H: So you say '3 more is 10.' You didn't raise a questioning inflection on 10.</p>
	<p>W: A little bit, I thought. [The tape is replayed.]</p>
<p>E: 3 from 20 is 17 and 4 from that is 13, and 3 <i>more</i> is 10 and you're half asleep. [Long pause.] And after you are awakened, Sue, I want to introduce you to some people. You haven't met them before. And you <i>really haven't</i>.</p>	<p>E: Waking her up, the 3 <i>more</i> is again literally an addition phenomenon. And yet, it's used as subtraction. Waking her up I would say 'half awake' because I wanted to add the idea of addition—I was going to use it later. I put in half <i>asleep</i> instead of half awake, and much later I could again use 8 plus 12 is 20.</p>
	<p>H: Why did you say 'you really haven't'?</p>
	<p>E: I wanted an amnesia. Now the effect of that is to transform the memory, the conscious memory of having met them, into a possibly trance hallucinatory experience. And to alter its identity. And thus it could be reduced to a trance experience and an amnesic experience.</p>
<p>E: . . . And you'll be pleased to meet them. I'll tell you their names now,</p>	<p>H: By saying 'you really haven't' the implication could be that what you say relates to an hallucination, you mean?</p>
	<p>E: Or the entire process of introduction was an hallucinatory experience belonging to a trance, therefore an amnesic experience.</p>

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but you will forget their names until after you awaken. But then you'll remember when I tell you them. Dr. and Mrs. Fingle.	<p>H: What she did after she awakened was ask about their names a couple of times, wasn't it?</p> <p>E: At least once.</p> <p>H: Trying to get it clear. And you said here, 'You'll forget their names until after you awaken and then you'll remember them.' Was she busy making sure she'd remember them?</p> <p>E: That's right.</p> <p>W: Wait a minute, why do you tell her the names and then tell her to forget them here? Is that to get that back into the trance experience so that she can get rid of it?</p> <p>E: Yes.</p> <p>H: You make this trance experience such an isolated thing.</p> <p>E: It serves to enhance specific phenomena.</p> <p>H: You don't say '20, 15, 10, 5, 1.' Would that be too sharp a jump for awakening?</p> <p>E: Maybe she isn't awakening that rapidly. I have to give her some time to catch up.</p> <p>W: And there you reinforce your previous suggestion by saying 'a couple of strangers.'</p> <p>E: Yes, that is, make your waking situation as valid as possible.</p> <p>H: They were strangers.</p> <p>E: If she hadn't met them before, I'd better agree with my statement—a couple of strangers. I'd better be consistent, too. And therefore I set the example of consistency.</p> <p>H: And she will use that as a model—if you set an example of consistency.</p> <p>E: I want to be consistent to give my subjects a feeling of comfort and security. I make my statements valid.</p> <p>W: Well, when you contradict one, you contradict it very flatly. 'You haven't met them.'</p> <p>E: 'And you <i>really</i> haven't.' What does <i>really</i> haven't mean? A very special significance.</p> <p>H: In what way is it special?</p> <p>E: 'You haven't <i>really</i> eaten a midnight snack until you have eaten one <i>I</i> prepared. You <i>really</i> haven't.'</p> <p>H: There's that playing on the word 'really' again.</p> <p>E: Yes.</p> <p>H: That's the trickiest word in the whole business. It's one of those words that can be literal or metaphorical or halfway in between.</p>
E: Who's asleep around here?	
S: I'm going back.	
E: How many times have you been asleep? Say any number of times.	
S: Four.	
E: [Pause.] Not bad.	
S: [Bursting out laughing.] I didn't really mean it. That	

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<p>just came out. [Both laughing.] E: You didn't really mean it, but you said it. S: I don't know. E: Do you want to change it? S: Mmm. E: Try it. Say a number. S: Mmm. E: You can't say a number. Can you say the same one? S: Four. E: Let's give it a count. S: How much? E: Oh, just any count! S: 1, 2 — oh no! [Apparently feels herself going in trance.] E: What's the matter? S: Nothing. E: Go ahead and count.</p> <p>S: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, [becoming more slow and inaudible. Pause.] E: You really convinced yourself that time, didn't you, Sue? You</p>	<p>H: Why did she stop when you said that? I've forgotten now. E: I asked her to give me any number, to count—'1, 2, oh, no!' She suddenly realized that she was counting in the direction of 20. W: Yes, she felt herself going to sleep. E: Now when you want to prove something to a subject, and really prove it to them, try to let the proof come from within them. And let it come from within them in a most unexpected way. W: That makes it different. I tried it once with a very resistant subject. I had him tell his hand to lift. Now that wasn't unexpected but it would have been proof from within himself. E: Yes. W: And he was so very reluctant to tell it to lift. He didn't want to find out so he didn't want to tell his hand. H: When she said 'count to how much?' it apparently hadn't crossed her mind then? E: No, it hadn't. 'Oh, just count.' '1, 2, oh no.'</p> <p>H: I remember now. She stopped overtly counting at about 17, and you waited until at that rate she would reach 20 and then you took a deep breath, wasn't that it? E: Yes.</p>

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really did, didn't you? Now you know, do you not? Now you know. And you really know it, do you not?	
	<i>E:</i> 'And you really know it, do you not?' What has been said that she really knows? At that particular time no specific thing had really been said. But I told her she knows. And it covers <i>everything</i> I have said. It's all inclusive. And she knows. And in trying to search for some specific thing she has to look over the entire situation.
<i>E:</i> And now Sue, I want you to have the feeling, the very, very strong feeling after you awaken that you've been asleep for a long, long time. At least two hours. I want you to have the feeling that you have been sleeping for two <i>long</i> hours. Very restful, very comfortable, and you won't believe your watch. And you won't believe it, will you? [Pause.] Because after you awaken ...	<i>W:</i> I notice you draw out all the words. <i>E:</i> 'And you won't believe your watch.' 'And you won't believe it, will you?' The suggestion [Firmly] 'And you won't believe your watch.' [Softly] 'And you won't believe it, will you?' That's the suggestion—'And you won't believe it, will you?' Literally hauling her over to join me. <i>H:</i> Yes, and the second one becomes a comment on the suggestion. <i>E:</i> A comment. A shared comment. <i>W:</i> I'm not quite sure I got that. 'You won't believe your watch.' Then what does the next one do? <i>E:</i> 'You won't believe your watch—and you won't, will you?' You see, it's a comment, and you're joining me on the comment as you listen to it. And when you comment on the suggestion, that suggestion is real; otherwise, you can't offer a comment. <i>W:</i> That's a thing we'd better think about, the matter of comment. And if there's no comment, maybe it isn't real. <i>H:</i> This is again, as far as we're concerned, metacommunication, which is communication about communication. <i>E:</i> Validate the suggestion by commenting on it. 'And you won't, will you?' 'And you won't believe your watch. And you won't, will you?' <i>H:</i> Was the phrasing, 'and you won't, will you?' the same as 'you can, can't you,' so if it comes to her mind, 'I will,' you had already said it? <i>E:</i> Yes. <i>E:</i> . . . you will know from your

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inner feeling that you have slept for two long hours. And you'll feel rested, refreshed. And now take it easy and just two hours have passed	<p><i>W:</i> You mentioned that she'll know from her inner feelings that she'll be rested and refreshed, because she's had that two long hours of sleep. This, then, builds up the disbelief in the watch because what is so sure as one's own real feelings?</p> <p><i>E:</i> One's own real feelings.</p> <p><i>H:</i> Not only disbelief in the watch, but she would disbelieve in every watch in the room then.</p> <p><i>E:</i> She had her feelings.</p> <p><i>W:</i> She had her feelings, and you had one feeling validated anyway. She felt it was two long hours and she felt refreshed as one would if he slept two long hours. Each one supports the other.</p>
<i>E:</i> . . . and you're really feeling rested and refreshed. 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. Wake up, wide awake.	<p><i>H:</i> Was there any deliberate hesitation in that count?</p> <p><i>E:</i> You can never be consistent. You can never really count backwards from 20 to 1 or forward from 1 to 20 always in the same way. You ought always to use hesitation and emphasis. On that particular occasion I just threw in some, not for any particular purpose except to demonstrate that I can use variations whenever I please. And I don't ever want to get stuck by a subject learning a rigid pattern.</p> <p><i>H:</i> I see, you mean, as the 'traditional' hypnotist does, a rote pattern that so many use.</p> <p><i>E:</i> The rote pattern.</p> <p><i>H:</i> I notice you hesitated on 12 and 8 there, was that all related to the 8 children and the dozen?</p> <p><i>E:</i> Not that I know of.</p>
<i>S:</i> I never did get through with that cigarette, did I?	<p><i>H:</i> That's a funny one. If she thought at that moment that she'd slept two hours, how could she make a comment like that about her cigarette.</p> <p><i>W:</i> What did she say?</p> <p><i>H:</i> 'I never did finish that cigarette, did I?' And it was burning there in the ash tray. Isn't that a contradiction.</p> <p><i>E:</i> Sure, it's a contradiction.</p> <p><i>H:</i> Is it only a little later that the realization it has been two hours comes over her?</p> <p><i>E:</i> She was coming out of a disoriented time state. She started to smoke the cigarette when awake. A long trance state intervened. Two hours long. Then she awakened, re-oriented to the original waking state because there's an amnesia for having been in a trance. And a general feeling that time has passed.</p> <p><i>H:</i> Wait a minute. When she said "I never did finish that cigarette," was she then thinking that she had just put that cigarette in the ash tray?</p>

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	<p><i>E:</i> [Drawing] Waking state and cigarette</p> 
	<p>Waking state and cigarette.</p>
	<p>There's your diagram. Now this upper line is a conscious memory line. But so far as she was concerned, consciously it was a continuum but with an underlying sense of time duration.</p>
	<p><i>H:</i> Yes.</p> <p><i>E:</i> This lower line is amnesic. But at the same time she has a feeling of the passage of time.</p> <p><i>W:</i> Which then you develop a little bit as I remember by beginning to speak to her about time.</p> <p><i>E:</i> Yes. Because she had to become <i>aware</i> of that long passage of time. Just as you're listening to a lecture and all of a sudden you realize, 'Oh my, I've been here longer than I realized.'</p> <p><i>W:</i> It's a funny way to try to get it, but the shortness and the longness go together in some way.</p> <p><i>H:</i> She had amnesia for the trance, but in the trance she was told to feel that two hours had passed.</p> <p><i>E:</i> And that's her first initial awareness 'I never did finish that cigarette.' You start asking your host a question, and an interruption occurs, and you've been enjoying yourself thoroughly, and then you say, 'I never did finish asking that question. Oh my, it's time for me to leave.'</p> <p><i>H:</i> Yes, let's see how she builds that up.</p>
<p><i>S:</i> You know, when I started counting, all of a sudden I only saw one eye. There was one eye over here.</p> <p><i>E:</i> No eye over here?</p> <p><i>S:</i> At first I was looking at both of them and then there was only one [referring to E's eyes.]</p> <p><i>E:</i> What else happened?</p> <p><i>S:</i> Nothing.</p> <p><i>E:</i> [Pause.] What happened the first time you counted, or started to count?</p> <p><i>S:</i> Were there two</p>	<p><i>E:</i> Her spontaneous development of a negative hallucination. She saw only one eye.</p> <p><i>H:</i> Does that have a metaphorical meaning—'eye' in the sense of 'me'?</p> <p><i>E:</i> Maybe. It would have taken time, had I thought of it at the moment. 'What happened to the rest of the room?' There was only one eye. A vague awareness of the rest of me, but only one eye. The vagueness of me, the absence of everybody else.</p> <p><i>W:</i> I wonder if that has any relation to the importance of one in another sense. If she counted 'one' that's all right, but if she had counted 'two'—would she go into a trance?</p> <p><i>E:</i> No, because you get that one eye response in other situations.</p>

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counts? I only remember one.	
E: Didn't you start to count and then refuse to count?	
S: Yes.	
E: What's the explanation of that?	
S: I was afraid.	
E: What were you afraid of?	
S: A very funny feeling.	
E: How did that feeling come to you?	
S: I don't know.	
E: What was the feeling really like?	
S: Sinking.	
E: Describe it more.	
S: Oblivion.	H: That's a kind of contradictory kind of description, isn't it? Sinking, oblivion, fear, but very comfortable.
E: Anything else.	
S: It was very comfortable.	E: Now, did you notice her use of words? How can one describe partial conscious awareness of trance development? I wonder what the word 'oblivion' meant to her.
	H: Well, she didn't misuse the word 'fear.'
	E: It's out of context 'comfortable-fear,' 'comfortable'—utterly contradictory.
	W: That's why Jay is raising the question.
	H: Fear, sinking, oblivion, but very comfortable. You don't think she could be afraid of the trance and feel it was comfortable at the same time?
	E: Yes, she could. But that's something I don't understand about oblivion and fear, and comfortable.
	H: And sinking.
	E: And sinking. Was she sinking into a nice, soft mattress? One of my patients always described it as sinking into a nice, soft, pleasing cloud, that floats so gently. A lot of them do, sinking in a very pleasing way.
	H: If it was so pleasing, she wouldn't have stopped at the count of two in that way, would she? She stopped startled, afraid.
	E: Startled? Afraid? 'Oh, no!' [Said softly.]
	H: You thought it was a pleased 'Oh, no!'
	E: An attitude of complete astonishment.
	H: You mean a realization attitude more than a fear attitude?
	E: Yes. Utter astonishment.
	H: I just wondered if she started to say how she felt about the trance, that she was afraid of it and was sinking into oblivion, and thought this might antagonize you and so she said 'but it was comfortable.'
E: Did T want to serve coffee now?	E: I don't think so. I just wondered about her use of words.

Induction	Comment
S: I guess it is about time. How was the movie?	
T: Watching television.	
S: That late?	
E: Look at your watch.	
S: It's amazing! [Laughter.] The thing's stopped!	
E: Do you believe your watch?	
S: Well, it stopped three times today. [Laughter.] No, it's going. Unless it stopped during the time. What does your watch say?	
SOMEONE: 8:30.	
S: Does anybody else have a watch?	
ANOTHER PERSON: 8:30.	
S: 8:30?	
E: Can't believe these watches.	
S: Not very much. [Laughter.]	
E: What time do you think it is?	
S: Oh, about 9:30, 10 o'clock.	
E: And what all has happened this evening?	
S: Maybe you were talking to somebody else! [Laughing.] I don't want to miss it though.	
E: [Laughs.]	
S: Don't do that to me!	W: There you say 'I have an idea you'd be a good subject.' This, now that she has done it—now your emphasis is on how about really doing something more.
E: You know, I have an idea you'd be a good subject!	E: Yes.
S: Nothing I want more in this world	W: Whereas, before, when you were getting her started, you were making the most of everything she did.
...	E: Yes, but it's a little bit more than that. You are having a perfectly wonderful time. Then you say, 'I have an idea that we could have more fun.' This confirms the goodness up to the moment and offers still further promise.

Induction	Comment
<p>S: I want to see the fawn that L saw.</p> <p>E: You would? That one or another one? Tell me, in Maine, haven't you seen a fawn?</p> <p>S: Every time I get near one — I never — I just see tracks.</p> <p>E: Haven't you ever seen a deer?</p> <p>S: I don't think so. I hunt 'em, but I can't ever find them.</p> <p>E: But in Maine, haven't you ever seen a deer or a fawn?</p> <p>S: Not right up close.</p> <p>E: In the distance.</p> <p>S: Not that I can recall. That's right. I think I may have seen one once.</p> <p>E: Was it in Maine?</p> <p>S: I think I was passing by in a car, but I don't remember.</p> <p>E: On the right, or maybe left hand side?</p> <p>S: No, it was going across the road.</p> <p>E: Going across the road. Was it a wide road?</p> <p>S: No, a dirt road.</p> <p>E: A dirt road?</p> <p>S: Mmhmm.</p> <p>E: Was it dry, a dry dirt road? Were there stones in it?</p> <p>S: Yes, I think . . .</p> <p>E: Yes, there were stones in it. Were there trees along the sides?</p>	<p>E: 'That one—or another one.' She's going to have doubts; let's spread them, the doubts, I mean.</p> <p>W: Oh, the doubts now are not on will you see it, but on what one will you see.</p> <p>E: Yes, she's got to have doubts. 'That one—or another one.' So I've split the doubt.</p>

Induction	Comment
<p>S: Yes.</p> <p>E: Yes. And look at it closely. And see it. And it's nice to see it, isn't it? Look closer. [Pause.] Look closely, quietly. Look. Look closer, quietly, before it goes away. See it clearly. [Pause.] Is it gone?</p> <p>S: I couldn't see it.</p> <p>E: You couldn't see it, look carefully. It's by that tree.</p> <p>S: It passed too quickly; just didn't see it.</p>	<p>H: Did she say 'It passed too quickly?' Did she mean the deer, or did she mean she was in the car?</p> <p>E: I think the deer.</p> <p>H: That's what I wasn't sure of last night. I couldn't tell whether she was going past too fast in the car or not.</p> <p>E: Now she had been in the waking state, and getting her to say 'Maine,' then again to say 'Maine,' and then my alteration in pronunciation of 'Maine,' and the very careful softening of my voice, and then to seize upon every clue.</p> <p>H: What was the alteration in the word 'Maine'?</p> <p>E: 'Was it in Maine?' I softened my voice very greatly.</p> <p>H: To start stalking the deer?</p> <p>E: Yes. And 'that tree?' A very specific tree, you know.</p> <p>W: I noticed the whole series there, how with every utterance you duplicate an utterance and then—</p> <p>E: Add another statement.</p> <p>W: I understand.</p> <p>E: And I led her from the waking state into an hallucinatory trance state.</p> <p>H: And rapidly too!</p>
<p>E: Look again, beyond that other tree. Coming out. It's going quite fast. Look. Did you see the movement there?</p> <p>S: Yes, but I missed the deer.</p> <p>E: You missed the deer. See the movement, the swinging of the branch?</p> <p>S: It starts.</p> <p>E: You'll see it the</p>	<p>E: Look again, beyond that other tree. Coming out. It's going quite fast. Look. Did you see the movement there?</p> <p>E: You missed the deer. See the movement, the swinging of the branch?</p> <p>S: It starts.</p> <p>E: You'll see it the</p>

Induction	Comment
<p>next time, won't you? The next trance you get, you'll see it. [Pause.] Close your eyes and sleep deeply. Now take a deep breath. Sleep deeply. And wake up and tell me again about wanting to see the fawn that L did. Start the conversation on that . . . Wake up . . . Wake up. From 20 to 1, wake up. [Louder.] So you want to see the fawn that L did?</p>	<p>E: Future trances. She'll see the deer.¹ H: Why do you suppose she didn't this time? Is it tied up with L and the fawn? E: L seeing the fawn, her wishful thinking—she never had, she wished she could, she always got there too late, she hunted and she only found the tracks. And every time you miss seeing the fawn—next time you will see it. So I'm laying the foundation for a future trance. It moved too quickly, so I told her of the swinging of the branch. That was put in to validate that movement. H: As I remember, you leaned back into the same position you were in just prior to her trance, didn't you? E: Yes, I usually tend to do that. [That is, to use positions, movements, and remarks to establish and re-establish situations, both trance and non-trance.]</p>
<p>S: [Waking voice.] She saw it so clearly.</p>	
<p>E: What are some of the other things that you'd like to see?</p>	
<p>S: [Pause.] Nothing.</p>	
<p>E: Nothing at all?</p>	
<p>E: But you really couldn't see that fawn that L saw. That was on the Au Sable River.</p>	
<p>S: I never even heard of it before.</p>	
<p>E: Where else besides Maine have you been?</p>	
<p>S: New York, California. I was in Florida a little while.</p>	
<p>E: You say you go hunting.</p>	
<p>S: Yes.</p>	
<p>E: Where have you been hunting?</p>	
<p>S: Out here.</p>	
<p>E: Kaibab Forest?</p>	
<p>S: No, we don't go for deer, just dove</p>	

¹ It was later learned that she had never really seen a deer in Maine.

Induction	Comment
and quail. Lots of fun.	
<i>E:</i> I like to eat them.	<i>E:</i> To emphasize the ordinary, casual situation, 'I like to eat them.' A highly personal statement, unrelated to the total situation. 'I have to clean them.' A highly personal thing, unrelated to that total situation. So she's really wide awake. My introduction of 'I like to eat them,' cleared the way for a completely full awakening.
<i>S:</i> I have to clean them, if I kill them. You like to clean them?	
<i>E:</i> I do.	
<i>S:</i> And oh, there he goes [the fly], on your nose. [S and E join in hunting the fly, but miss.]	
<i>S:</i> That's so — a hunt.	
<i>E:</i> You know, I prefer to get them seven at a blow.	
<i>S:</i> <i>Sept d'un coup?</i>	
<i>E:</i> You want to go deer hunting?	
<i>S:</i> I don't think so. I don't think I could kill one.	
<i>E:</i> Haven't you ever seen any—deer, when you—	
<i>E:</i> There [referring to fly.]	
<i>S:</i> Please, please [pursuing with fly swatter.] Here he is. This is really a big home. In my home you can corner them.	
<i>E:</i> When was the last time you were in Maine?	
<i>S:</i> Last summer. If it's on me, don't worry, you can hit me. He's young. Got a lot of energy. There he is! Now he's back behind you.	
<i>E:</i> Doggone that fly. [Pause.] When was the last time you were in Maine?	
<i>S:</i> Last summer, June 19th.	

Induction	Comment
<p>E: Did you ever go up in the woods at all?</p> <p>S: No, I was with the children, right in camp.</p> <p>E: And that's where you learned your driving, is it?</p> <p>S: Yes.</p> <p>E: How old were you when you learned to drive?</p> <p>S: Oh, 15 or 16.</p> <p>E: And you had so little mercy on the boys there that you tried to run 'em down?</p> <p>S: Oh, that was just teasing. I was always teased at camp because I was the only girl in a boys' camp.</p> <p>E: So you learned to drive a car at 16.</p> <p>S: Yes, I learned a lot of things in Maine.</p> <p>E: And everybody rushed for the canoes?</p> <p>S: They didn't really. They only . . .</p> <p>E: They stood up.</p> <p>S: Yeah, that's what the K's were telling them all.</p> <p>E: How many boys were there at the camp?</p> <p>S: Then, oh, I think — about 40, 45, maybe. Now it's much bigger.</p> <p>E: I see.</p> <p>S: Now they've got 120.</p> <p>E: A hundred and —twenty.</p> <p>S: Mmm.</p> <p>E: [Pause.] A hun-</p>	<p>E: Did you realize that I was building up there in asking her about how old she was when she learned to drive a car. I was building up very carefully for an hallucination, a recovered memory of a long time ago. It seems to have been done very slowly, casually, and yet essentially it was done very rapidly.</p> <p>H: She had to say twenty, didn't she?</p>

Induction	Comment
<p>dred and <i>twenty</i>. Take a deep breath. Because I want you to do something. And you can <i>remember</i> that camp. You saw that camp many times. And, as you think back, you can remember this boy and that boy — when you were 16. And you can look at your memory of that camp. And as you think back, you can recall this boy, and that boy, when you were 16. And you can look at your memory of that camp.</p>	<p>E: And as you think back, you can recall <i>this</i> boy and <i>that</i> boy. H: Oh, by your movements you were setting them up? E: Setting them up. <i>This</i> boy. <i>That</i> boy. Rolling back a bit [Shifting position in chair.]</p>
<p>E: And I want you to see if there was grass around there. Was there a beach? Was the water smooth? Were there really trees there? Were they green? And look, and look up there and see a canoe, or see a boy, or see the beach, or see the water. You're beginning to see, and I want you to recognize one of the boys who was <i>there when</i> you were 16. And you can do that. See him plainly, clearly, and I want you to point to him. Point to him, and</p>	<p>E: 'And you can look at your memory of that camp.' 'You can' implies 'you can <i>now</i> look back.' And there I'm looking. It implies <i>now</i>. H: Did you select boys to look at on the basis of her phrase, 'I learned a lot of things in Maine'? E: No, her statement was that she had been in that camp. The counselor always told the boys 'take to the cliffs, she's going to drive.' So there you've got an emotional memory. I believe her family owned the camp.</p>

Induction	Comment
<p>slowly your hand moves. It's going to point to him. And look — and see. Take your left hand and point. And point to him. That's it. That's it. Move your hand and point to him. Move your hand and point to him, and <i>see him</i> more and more plainly, and you can point. Are you pointing? Nod your head when you can see it shaping. Are you pointing? Are you pointing? [Pause.] Sleep deeply. [Long pause.]</p>	<p><i>H:</i> Notice my suggestion to point, 'take your left hand and point,' because I knew I was getting into deep water there, that is, severe difficulties.</p> <p><i>H:</i> Why deep water?</p> <p><i>E:</i> Very deep water, because she wasn't making adequate response to me. So then I narrowed it down, 'take your left hand and point.' I knew I was getting in deep water there. I didn't know exactly what it was. I asked her to point. Her hand didn't point, so then I started narrowing down. Have her point with her left hand. When she failed to do that, I knew how deep in the water I was. I was out of contact with her. She was back there [Regressed spontaneously]. I made awfully sure of it, then I verified it by trying to get her to move her left hand to point, then I verified it by trying to get her to nod her head. I got no response at all.</p>
<p><i>E:</i> And after you awake you will recall one of the boys you haven't thought of [Pause] for a long time. You will tell me about him, will you not?</p>	<p><i>H:</i> I remember wondering why you couldn't get any response from her on that.</p> <p><i>E:</i> Because I wasn't there. She was there [in Maine, in regression]. Out of touch with me. She had drifted into that at the sound of my voice. I kept on. And you noticed that my voice went down and down and down [in volume]. So that I could lead into a silence.</p> <p><i>E:</i> Now how did that begin? [Referring to tape record.]</p> <p><i>W:</i> 'And after you awake, you will recall.'</p> <p><i>E:</i> A long pause. Soften the voice, a long pause, and the introduction of my voice saying something I had said before, 'after you are awake.' I gave her a long enough time to look at that boy. Then I used the words 'you will recall the boy you haven't thought of for a long time,' and if she hasn't thought of the boy for a long time, she can't possibly be back there in Maine.</p> <p><i>H:</i> That was your way of bringing her out of it?</p> <p><i>E:</i> Yes.</p> <p><i>H:</i> Why didn't you want to regress her and have her there, and use that? I mean, make contact with her there?</p> <p><i>E:</i> You have to lay the foundation; I hadn't laid the foundation. Because I didn't want to lose her, and I lost her there for a little while. Then I had to resort to silence, then begin with a suggestion I'd given before, and match it with 'not for a long time.'</p> <p><i>H:</i> Suppose you had said, 'Who am I?' or brought yourself into it somehow back there, even without the foundation, what would happen?</p> <p><i>E:</i> I'd probably have been a counselor.</p> <p><i>H:</i> Well, what foundation should have been there that was absent, so you didn't want to do this sort of thing?</p> <p><i>E:</i> My voice is my voice; it's really not me. My voice can be heard with a phone. It can be heard on a tape recording. My voice can be heard in</p>

Induction	Comment
	places where I'm not. And you could hear my voice in Florida, New York, California, Kaibab Forest, if you were ever there.
	H: If you had done that earlier, you could have maintained contact while she was back there?
	E: Yes, but I would have been a voice, and my voice could have been transformed into a counselor's, into her father's or mother's, and very often I've been identified as father, mother, uncle, aunt, cousin, the neighbor, teacher.
	H: That's partly, too, why she referred later to how she was alone in Maine?
	E: Yes, I wasn't there. Now if I'd laid my foundation, I could have been the voice of someone there talking to her. And that's difficult work because you have to use such very general questions that can be interpreted in terms of the people in that situation. I've had subjects comment on the screechiness of my voice, 'My teacher talked to me and that screechy voice of hers is still ringing in my ears,' and then repeat the things I had said. Too many operators, when they lose contact, fail to go right on as if they hadn't lost contact, lower their voices, and make use of silent techniques. Then slowly come out of it by utilizing previous utterances. And then throw in something that nullifies the regressed state.
	W: By lowering your voice down to the pause, then in effect you join the loss of contact, too, and take that over.
	E: Yes, because I've been training her all evening to accept and respond to my silences. I'd be curious to find out how long that visit she made was. It might have been an hour or two.
E: [Long pause.] Sleep deeply, and now awaken. 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. Wake up. And I still haven't got that fly. S: Oh!	
E: I hope you have better luck with your doves than you are having with this fly. S: I hope so, too.	
	H: Is that amnesia again?
	E: Yes.
	W: Which you provoked with the reference to the fly. Your reference to the fly there is similar to her reference to the cigarette before.
	E: Yes.
	H: Do you usually calculatedly remember what was going on just before you started the induction, so you can set that up again afterwards?
	E: I try to. It really promotes amnesia.

External circumstances caused an interruption of the commentary at this point, but further analysis would have served only to emphasize, with variations and modifications occasioned by the immediate intrinsic circumstances, the understand-

ings already elaborated. It may be added that henceforth Sue was a competent subject, capable of all phenomena of the light and deep trance, including even the plenary state.

To summarize, a tape recording was made of a spontaneous and unplanned hypnotic induction of a somewhat resistant subject who had failed on three previous occasions to develop a trance and who believed that she could not be hypnotized. The next day this recording was played back by the authors, with many systematic interruptions to permit a point-by-point discussion and explanation of the significances, purposes, and interrelationships of the various suggestions and maneuvers employed in developing the subject's hypnotic responses. A transcription of a second recording, made of the entire procedure, constitutes this paper.

Historical Note on the Hand Levitation and Other Ideomotor Techniques*

IN THE SPRING of 1923 at the University of Wisconsin, interest was expressed by Clark L. Hull, Ph.D., Associate Professor of Psychology, in the writer's experimental work on hypnosis. The suggestion was offered that the writer continue his studies throughout the summer and then report upon them before a post-graduate seminar on hypnosis to be conducted by the Psychology Department.

All of this was done, and the first formal post-graduate course in hypnosis was initiated at the University of Wisconsin in September 1923, probably the first one in the United States. This seminar was devoted to a systematic examination and discussion of the summer's experimental procedures and findings reported upon or demonstrated before the group. Also presented was additional work initiated and performed by the writer during that academic year.

During that summer of 1923, among other things, the writer became interested in automatic writing, first secured from subjects in a trance state and subsequently by post-hypnotic suggestion. This gave rise to the possibility of using suggestions conducive to automatic writing as an indirect technique of trance induction for naive subjects. Although successful, it proved to be too slow and laborious an induction technique in most instances. It was modified by suggesting to the subject that, instead of writing, the pencil point would merely move up and down on the paper, or from side to side. The vertical or horizontal lines thus secured were later found to be an excellent approach to the teaching of automatic writing to difficult subjects.

Almost from the first trial it was recognized that the pencil and paper were superfluous and that the ideomotor activity was the primary consideration. Accordingly, the writer, using his younger sister Bertha as a subject for the first time, induced a somnambulistic trance by a simple hand-levitation technique. Thereafter many variations of this original technique were devised until it became apparent that the effectiveness of many supposedly different techniques of trance induction derived only from a basic use of ideomotor activity, rather than from variations of procedure, as is sometimes naively believed and reported. Perhaps of all the many variations of ideomotor techniques of induction that may be devised, the more generally useful are (1) simple direct hand-levitation because of the possibility of visual participation, and (2) the slightly more complex rhythmical hand levitation, in which visual and memory participation frequently lead to the ideo sensory response of auditory hallucinations of music and the development of a somnambulistic trance.

Another highly technical and complicated procedure of trance induction was developed that summer and repeated in many variations, but with no real understanding at that time of what was involved. A sixteen-year-old boy, who regularly drove a milk wagon, had never before been hypnotized. He was asked to sit quietly in a chair and silently review in his own mind every feeling throughout his body as

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he systematically recalled the events of the twenty-mile milk route over which he regularly drove a team of horses. The further explanation was given that, even as one can remember names, places, things, and events, so could one remember body feelings of all sorts and kinds. This he was to do by sitting quietly in the chair with his eyes closed and to imagine himself driving along the highway, feeling the reins in his hands and the motions of the wagon and of the wagon seat.

Shortly it was noticed that he was shifting his hands and body in a manner suggestive of the actual experience of driving a team of horses. Suddenly he braced his feet, leaned backward, and presented the appearance of pulling hard on the reins. Immediately he was asked, "What are you doing now?" His reply was, as he opened his eyes, "Going down Coleman hill." (The writer himself had often driven that same milk route in the same wagon and recognized the characteristic behavior of handling the team in going down that steep tortuous hill!)

Thereafter, with his eyes open and obviously in a somnambulistic trance, although he continued to sit in the chair, the boy went through a long, slow process of seemingly driving the horses, turning now right, now left, and heaving with his shoulders as if lifting cans of milk, thus reliving largely the experience of actually driving the milk route. The writer's own experience with that same milk route permitted a ready recognition of the progress being made along the route.

However, at one particular stretch of the road where there were no farm houses, the boy went through the motions of pulling on the reins and calling "Whoa!" He was told to "drive on" and replied "Can't." After many futile efforts to induce him to continue driving and always eliciting the same response of "Can't," he was asked why he couldn't. The laconic reply of "Geese" was given. The writer immediately recalled that on infrequent occasions in his own experience a certain flock of geese happened to choose the moment of the milk wagon's arrival to cross the highway in single file on their way to another pond, thus stopping traffic.

This first trance lasted several hours as the boy went through the events of the "trip," and it seemed impossible to break into and interrupt it. Not until he turned the horses into the home driveway could the trance be terminated.

This particular trip was repeated in later similarly induced trances with similar results. The boy was also asked to relive other trips, in none of which the geese happened to appear, but his neglect of the established practice of letting the horses rest at a certain customary spot was disclosed in one such reliving.

At the time of this work, there was no recognition by the writer of kinesthetic memories and images as a trance induction technique, but it led to a systematic and profitable investigation of the possibility of using any sensory modality as a basic process in inducing hypnotic trances.

During his first demonstration of the hand levitation technique of trance induction to that 1923-1924 seminar group, a special finding was made by the writer of the spontaneous manifestation in a volunteer subject of hallucinated ideomotor activity. She had volunteered to act as a subject for a demonstration of what the writer meant by a "hand levitation trance induction." While she and the group intently watched her hands as they rested on her lap, the writer offered repeated insistent appropriate suggestions for right hand levitation, all without avail. Silent study of the subject in an effort to appraise the failure of response disclosed her gaze to be directed into mid air at shoulder level, and her facial expression and apparent complete detachment from her surroundings indicated that a deep trance

state had developed. She was told to elevate her left hand voluntarily to the level of her right hand. Without any alteration of the direction of her gaze, she brought her left hand up to shoulder level. She was told to replace her left hand in her lap and then to watch her right hand "slowly descend" to her lap. When it reached her lap, she was to give immediately a full verbal report upon her experience. There resulted a slow downward shifting of her gaze and, as it reached her lap, she looked up at the group and delightedly gave an extensive description of the "sensations" of her hallucinatory experience, with no realization that she had actually developed her first known trance state, but with an amnesia for the reality of the trance experience as such, though not for the content.

She asked to be allowed to repeat her experience and promptly did so. This time the group watched her eye and facial behavior. Again, there was no hand movement, but all agreed that she developed a somnambulistic trance immediately upon beginning to shift her gaze upward. This conclusion was put to test at once by demonstrating with her the phenomena of deep hypnosis. She was then aroused, and there followed an extensive discussion of "kinesthetic imagery" or "kinesthetic memories" as possible techniques of hypnotic induction. The writer was assigned the task of further experimental work on these ideas, to be reported at the next meeting.

That report, in brief, was simply that trances could be induced in both naive or experienced subjects by techniques based upon (1) the visualization of a motor activity such as hand levitation or by visualizing the self climbing up or down a long stairway, and (2) upon "remembering the body and muscle and joint feeling and sensations" of motor activity of many kinds. To this was added the report on the findings with the sixteen-year-old boy.

Approximately 15 years after these earlier studies on ideomotor techniques had been reported to the seminar group at the University of Wisconsin, another study was begun. This was initiated by the observation that, especially at lectures on controversial topics, there are those in the audience who will unconsciously slowly nod or shake their heads in agreement or disagreement with the lecturer. This observation was further enhanced by noting that certain patients, while explaining their problems, will unwittingly nod or shake their heads contradictorily to their actual verbalizations. These informative manifestations suggested the possibility of utilizing this type of ideomotor activity as a hypnotic technique, particularly for resistant or difficult subjects, although it can also be used readily on naive subjects.

The actual technique is relatively simple. The explanation is offered to the subject that an affirmative or a negative answer can be given by a simple nod or shake of the head. Also, it is explained that thinking can be done separately and independently by both the conscious and unconscious mind, but that such thinking need not necessarily be in agreement. This is followed by asking some question phrased to require an answer independent of what the subject may be thinking consciously. Such a question is, "Does your unconscious mind think you will learn to go into a trance?" After being asked this type of question, the subject is told to await patiently and passively the answering head movement which will constitute the answer of his "unconscious mind." A rapid or forceful response signifies a "conscious mind" reply. A slow, gentle head movement, sometimes not perceived by the subject, constitutes a direct communication from the "unconscious mind." With the response, catalepsy develops and a trance state ensues rapidly.

Or, as a simple variation, one can suggest that the levitation of one hand signifies the answer "yes," the levitation of the other, "no," the levitation of both, "I don't know" and then ask the above or a comparable question. The development of a trance state is concurrent with the development of levitation, regardless of the significance of the reply.

These techniques are of particular value with patients who want hypnosis, who could benefit from it, but who resist any formal or overt effort at trance induction and who need to have their obstructive resistances by-passed. The essential consideration in the use of ideomotor techniques lies not in their elaborateness or novelty but simply in the initiation of motor activity, either real or hallucinated, as a means of fixating and focusing the subject's attention upon inner experiential learnings and capabilities.

Pantomime Techniques in Hypnosis and the Implications*

IN THE EARLY EXPERIMENT done by this author on hypnotic deafness, verbal communication having been lost as a result of the induced deafness, the value of pantomime was recognized, used, and then replaced by written communications as easier.

The Pantomime Technique as a hypnotic technique complete in itself resulted from an invitation to address an affiliated society of American Society of Clinical Hypnosis, the Grupo de Estudio sobre Hipnosis Clinica y Experimental, in Mexico City in January, 1959.

Just before the meeting, the author was informed that he was to demonstrate hypnosis as the introduction to his lecture by employing as a subject a nurse they had selected who knew nothing about hypnosis nor about the author and who could neither speak nor understand English, and they already knew that I could not speak nor understand Spanish. They had explained privately to her that I was a North American doctor who would need her silent assistance and they informed her of our mutual language handicaps and assured her that she would be fully respected by me. Hence, she was totally unaware of what was expected of her.

This unexpected proposal to the author led to rapid thinking about his past partial uses of pantomime by gesture, facial expressions, etc. This led to the conclusion that this unexpected development offered a unique opportunity. A completely pantomime technique would have to be used, and the subject's own state of mental uncertainty and eagerness to comprehend would effect the same sort of readiness to accept any comprehensible communication by pantomime as is effected by clear-cut definite communications in the Confusion Technique.

She was then brought through a side door to confront me. Silently we looked at each other, and then, as I had done many times previously with seminarians in the United States in seeking out what I consider clinically to be "good responsive" subjects before the beginning of a seminar and hence before I was known to them, I walked toward her briskly and smilingly and extended my right hand and she extended hers. Slowly I shook hands with her, staring her fully in the eyes even as she was doing to me and slowly I ceased smiling. As I let loose of her hand, I did so in an uncertain irregular fashion, slowly withdrawing it, now increasing the pressure slightly with my thumb, then with the little finger, then with the middle finger, always in an uncertain irregular, hesitant manner and finally so gently withdrawing my hand that she would have no clear-cut awareness of just when I had released her hand or at what part of her hand I had last touched. At the same time, I slowly changed the focus of my eyes by altering their convergence, thereby giving her a minimal but appreciable cue that I seemed to be looking not at but through her eyes and off into the distance. Slowly the pupils of her eyes dilated, and as they did so, I gently released her hand completely, leaving it in mid-air in a cataleptic position. A slight upward pressure on the heel of her hand raised it slightly. Then

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catalepsy was demonstrated in the other arm also and she remained staring unblinkingly.

Slowly I closed my eyes and so did she. I immediately opened my eyes and stepped behind her and began explaining what I had done in English, since most of the audience knew English fairly well. She made no startle response and did not even seem to hear me. I gently touched her ankle and then gently lifted her foot leaving her to stand cataleptically on one leg. One of the doctors knew I had a smattering of German and held up his fist, opened it, saying questioningly, "die Augen." Gently I touched her closed lids and gave a slight upward pressure. She slowly opened them and looked at me with her pupils still dilated. I pointed to my feet, then to her upraised cataleptic foot and signalled a downward movement. She frowned in puzzlement apparently at seeing both her hands and her foot uplifted, then smiled at my downward signal toward her foot only and she put her foot down with what appeared to me to be an expression of some slight embarrassment or bewilderment. The arm catalepsy remained unchanged.

Several of the doctors called her by name and spoke to her in Spanish. She merely looked at me attentively, making no involuntary head or eye movements so common when addressed from some distance away by someone else, nor did she seem to pay any further attention to her hands.

I was asked in English if she could see the audience since apparently she could not hear them. I moved her hands up, down and across while she seemed to watch them and my eyes alternately. Then I pointed to my eyes and to her eyes by bringing my fingers close to them, then I made a futile hopeless sweeping gesture of my right hand toward the audience as I assumed a look of blank surprise and wonderment as I faced the audience as a pantomime of not seeing anybody. She did likewise, showed a startled reaction and asked in Spanish, as I was told later, "Where are they? The doctors are supposed to be here?" Several of the doctors spoke to reassure her but she merely continued to look frightened.

I promptly attracted her attention by putting my fingers close to her eyes, then to mine, then I lifted her hand and looked with a pleased smile at the ring on her hand as if I admired it. Her fright vanished apparently.

One of the audience asked me how I would awaken her. I showed her the second hand on my watch, marked out ten seconds of time by synchronizing a finger movement with the second hand movement. She watched intently. Then I had her watch me close my eyes, beat out about ten seconds and then I opened my eyes with an upright alert jerk of my head. Then I smiled and with a nod of my head and a movement of my hand I indicated that she was to do likewise. As she did so, I stepped back rapidly and when she opened her eyes she saw me at the far end of the platform. I immediately walked forward briskly with a pleased smile and extended my hand in greeting. This reestablished the original way in which we had met and she awakened immediately, shook hands with me as she looked me over. I bowed and said, "Thank you very much. I am most appreciative," as if dismissing her. One of the doctors translated my remarks; I repeated myself and again shook hands in a dismissal fashion. She looked puzzled and uncertain so one of the group told her she could now leave. She left the room in what to me seemed a most puzzled fashion.

Later, I was informed that she had developed a total amnesia for the entire experience, and had expressed wonderment at my immediate dismissal of her when

she was supposed to assist me. She also expressed disbelief in hypnosis but volunteered as a subject, promptly developed a profound trance, recalled all of the events of her experience with the author including the "departure (negative hallucination) of the audience" and her "puzzlement" when dismissed, but when aroused from this trance, she again manifested a complete amnesia for both trances. She was subsequently used extensively by members of that group as an assistant and as an experimental and instructional subject.

The second unexpected, complete pantomime, induction was done in January, 1961 during a visit to Caracas, Venezuela. I had been invited to tour the Hospital Concepcion Palacios during which I was asked to address the staff on the use of hypnosis in obstetrics at an impromptu meeting in the conference room. One of the audience suggested that I demonstrate as I discussed the phenomena of hypnosis. Remembering my experience in Mexico City, I asked if I might work with some young woman who did not know the purpose of my visit there and who did not understand English and who had had no experience in hypnosis of any sort. Three young women were brought in and I looked them over and selected the one who gave me a clinical impression of what I term "responsive attentiveness." I asked that the others be dismissed and that she be told that I wished her cooperation while I lectured. Very carefully, my translator so informed her without giving her any more information and she nodded her head affirmatively.

Stepping over to her and standing face to face with her, I explained in English for those who understood it that they were to watch what I did. My translator kept silent and the young lady eyed me most attentively and wonderingly.

I showed the girl my hands, which were empty, and then I reached over with my right hand and gently encircled her right wrist with my fingers, barely touching it except in an irregular uncertain, changing pattern of tactile stimulation with my fingertips. The result was to attract her full attentive expectant wondering interest in what I was doing. With my right thumb, I made slight tactile pressure on the latero-volar-ulnar aspect of her wrist, as if to turn it upward; at the same moment, at the area of the radial prominence, I made a slightly downward tactile pressure at the dorso-lateral aspect of her wrist with my third finger; also at the same time, I made various gentle touches with my other fingers somewhat comparable in intensity but nonsuggestive of direction. She made an automatic response to the directive touches without differentiating them consciously from the other touches, evidently paying attention first to one touch and then to another. As she began responding, I increased varyingly the directive touches without decreasing the number and variation of the other distracting tactile stimuli. Thus, I suggested lateral and upward movements of her arm and hand by varying tactile stimuli intermingled with a decreasing number of nondirective touches. These responsive automatic movements, the origin of which she did recognize, startled her, and as her pupils dilated, I so touched her wrist with a suggestion of an upward movement and that her arm began rising so gently discontinuing the touch that she did not notice the tactile withdrawal and the upward movement continued. Quickly shifting my fingertips to hers, I varied the touches, so as to direct in an unrecognizable fashion a full upward turning of her palm, and then other touches on her fingertips served to straighten some, to bend others, and a proper touch on the straightened fingertips led to a continuing bending of her elbow. This led to a slow moving of her hand toward her eyes. As this began, I attracted with my fingers

her visual attention and directed her attention to my eyes. I focused my eyes for distant viewing as if looking through and beyond her, moved my fingers close to my eyes, slowly closed my eyes, took a deep sighing breath and sagged my shoulders in a relaxed fashion and then pointed to her fingers which were approaching her eyes.

She followed my pantomimed instructions and developed a trance that withstood the efforts of the staff to secure her attention.

I asked for her name and one of the staff gave it to me in rapid Spanish, the translator repeated it, laboriously enunciating the name so that I could grasp the phonetics. She made no response to anything the staff or the translator said or did, merely standing passively. When someone tried to push her, she became actively rigid but made no other response. I led her about the room, touching her eyelids to indicate that she was to open them, and then indicated a chair, in which she seated herself. Even with her eyes open, she seemed oblivious to everyone there and to all auditory stimulation.

I learned that she was a resident physician and that she had not yet been introduced to hypnosis. While she sat with her eyes open and apparently unseeingly and unhearingly, I discussed hypnosis.

At the close of my remarks, I awakened her by turning to her and indicating she was to stand. Then, with the gesture of brushing my palms across each other as if the task were all done, I smiled at her and bowed. The hypnotic facial expression disappeared, she looked about the room and asked, as I was told later, "What am I to do?" while, I, not understanding, bowed and said, "Gracias, Señorita." She looked puzzled, my translator explained her task was done and she left in a puzzled manner. I then began to answer questions from the audience.

The following August of the same year—that is, six months later—I visited there and again lectured to the staff. My former subject was present in the audience and when I beckoned to her to come up on the platform, she did so in a pleased fashion but developed spontaneously a deep trance just before she reached the desk at which I sat.

She had in the meantime not only been a hypnotic subject but had also used it on her patients. As a result, despite the author's linguistic handicap, she could anticipate some of the phenomena that the author wished to demonstrate. In addition, a translator conveyed his requests to her after rapport was transferred to him. This transfer of rapport was effected by the process of pointing to my right hand, then to hers, shaking hands with her, then withdrawing my hand, indicating it, reaching over and shaking hands with my translator while I indicated to her with my left hand that she was to see the translator and to do likewise, and as they shook hands, they exchanged greetings in Spanish.

The next unexpected completely pantomime initial induction was done in Venezuela that same month before the Medical Society in Caracas. Just as I was about to begin my lecture, I was courteously interrupted by the officers and the explanation was offered that many of the doctors present did not believe in hypnosis, that there was much conviction that I had a confederate with whose aid I would perpetrate a hoax. They were obviously most distressed to tell me this but explained that, as the officers of the society, they had been delegated to ask me to demonstrate hypnosis by maintaining a complete silence and to select someone from the large audience for whom they could secure a valid identification. I replied that I hoped the subject I secured would not be able to understand English.

In the rear of the auditorium, I saw a woman about 30 years old who gave every evidence of what I term that "responsiveness," which I personally consider a most helpful indication of hypnotizability. I pointed the woman out to my translator, she was questioned for her identity, was discovered to be the wife of a physician who did not believe in hypnosis and that she too did not believe in it and had never seen it. However, she readily came to the platform, differing from the Mexico City nurse in that she knew hypnosis was under consideration. As she approached me, I asked, "And if you please, what is your name?" She turned to the translator and asked him what I had said and this was broadcast by the public address system present. Thus the point was made that she did not understand English.

Essentially the same technique as was used in Mexico City was employed with the same hypnotic results. However, one addition was added. I patted the back of my hand gently during the demonstration and smiled as if I liked the sensation. I did likewise to her hand and she too smiled.

Then I brushed off the back of my hand as if I were brushing away all sensation. I then pinched and twisted the skin of my hand in an obviously painful fashion but wore a look of profound astonishment and wonderment as if I felt nothing and then smiled happily. I reached for her hand, did likewise, and in astonishment, she turned to my translator who, ill at ease on my account, had assured her as she came to the platform that he would remain on the platform as would the officers and she should feel free at any time to speak to him.

As I forcibly pinched and twisted the skin of her left hand, the officers crowded around, did likewise and the woman also tested her hand. She then asked the officers what had happened to her hand and asked if it (her hand) were dead, speaking in what the translator later reported as a tone of distress. A doctor in the audience and several others in the audience reassured her. She did not seem to hear them, and a negative hallucination of the audience, visual and auditory was spontaneously manifested. But the translator's explanation was readily heard by her as were those of the officers on the platform. In other words, she had interpreted the platform situation initially as signifying rapport with those who were there but not with the audience even though her husband was in the audience.

A Doubting Thomas in the audience declared in Spanish that he was fully convinced of the validity of hypnosis and asked the officers of the society if he could volunteer as a subject. This request was translated to me. Keeping the woman still there, I accepted his offer and results similar to those with the woman were secured. However, he aroused from the trance state with a total amnesia and asked the translator to tell me to begin the hypnosis, a request that was broadcast by the public address system. He was reinduced, and the translator told him in Spanish, "After awakening, remember all." Upon awakening from the trance, he was most effervescent in his excited pleasure and the woman too was much impressed by what she had seen occur with the Spanish physician. In each instance, the awakening of the subjects was done by grasping their hands firmly, and since both had their eyes open, shaking their hands briskly and shaking my head briskly as if arousing and clearing my mind. Since the doctor had seen this maneuver with the woman, he responded more quickly than she had.

In brief, hypnosis is a cooperative experience depending upon a communication of ideas by whatever means is available and verbalized ritualistic traditional rote memory techniques for the induction of hypnosis are no more than one means of

beginning to learn how to communicate ideas and understandings in a joint task in which one person voluntarily seeks aid or understandings from another.

In two experiences in hypnotizing deaf and dumb persons, sign language was employed with the added pantomime of listlessness and fatigue of movement in making the sign language. With these two subjects, rapport was lost if they closed their eyes and resort had to be made to a sharp shaking of them by the shoulder to awaken them, such a cue having been incorporated into the trance-inducing suggestions originally. When the measure of suggesting that they keep their eyes open in the deep trance was used, their peripheral vision greatly decreased and became so central in character that perhaps only one finger of a letter sign would be seen unless instructions to the contrary were given. However, a total of four trances with two such subjects is only adequate enough to state that the usual hypnotic trance and attendant phenomena can be induced in the neurologically deaf and dumb by sign language but that there appears to be a profound loss of peripheral vision with a consequent loss of some rapport. This raises an intriguing question of why a trance should cause, in such subjects who are so dependent upon sight, a much greater loss of peripheral vision than this writer has encountered in trances in many thousands of people with normal vision, although a more limited loss is common. If, however, a trance is induced in such subjects by pantomimed instructions to keep the eyes open and to read lip movements, there is no such loss of peripheral vision even though they had previously spontaneously seen only one digit of a three-finger sign. In explanation of this finding, one of the subjects explained, "Lip reading is really face reading, sign language is reading one sign."

Similarly, if during the induction, sign language instructions are given that after a trance is developed they are to receive instruction through written communication, the loss of peripheral vision is minimal. This was explained by the same subject as, "In reading you see the paper or the blackboard too." Unfortunately, the data on these subjects are insufficient to warrant further discussion.

The first and only previous report on the subject of deaf-mute induction of which this author is aware was presented by Dr. Alfredo Isasi of Barcelona, Spain at the Fifth European Congress of Psychosomatic Medicine in April, 1962, and published in September, 1962 in *La Revista Latino-Americana de Hipnosis Clinica* (Vol. 3, pp. 92-94.) It is entitled "Dos casos de sofrosis en sordomudos (Two cases of sophrosis (hypnosis) in deaf-mutes)." In this report, a technique of inducing hypnosis in deaf mutes, a demonstration of which has been filmed, is described in detail. After the initial communication by sign and gesture, the hypnotic state was induced through stroking and gentle pressure on the forehead, eyelids, and jaw line, and testing by raising the arms gently and releasing them. Relaxation, analgesia, and control of bleeding enabling successful dental work in previously apprehensive, fearful, uncooperative patients was achieved. Two case records of young men, deaf-mutes, were presented in detail.

COMMENTS

PERHAPS THE MOST PERTINENT ASPECT of this matter of trance induction by a pantomime technique is the ease with which a communication of ideas and understandings can be effected without verbalization and in situations in which the subject may be totally uninformed as to the nature of the proposed task being done by

two people of different cultures, languages, social usages and customs. If then one thinks of the many so-called "controlled studies and reports" found in the hypnotic literature in which two homogeneous groups, one called experimental, one called "control" are handled by the same experimenter who uses slightly different words but has a full knowledge of what results he expects to secure, one can well wonder just how "controlled" are these experiments.

But when "control subjects" have been previously hypnotized by the experimenter or others or have watched hypnotic inductions and experiments of others by the experimenter, (who, of course, knows that he expects to duplicate hypnotic behavior in the "waking state" of the "control subjects"), one does more than wonder about the experimenter's scientific acumen. To this author, both the intelligence and the scientific integrity on the part of the experimenter are in question, seriously so!

In the late 1920's, 30's and 40's, this author did some research involving the comparison of the dream symbolism of Hindu mentally ill patients with that of native-born Massachusetts and Michigan patients, using information obtained from Drs. Lalkaka and Govindaswamy, respectively of Bombay and Mysore of India. Similarly, he then used recently drawn pictures by newly admitted mentally ill American patients which were compared with those collected by Hans Prinzhorn in "Bildnerei Der Geskranken" (Verlag, Berlin, 1923) of mentally ill Germans. The similarities were amazing, until one realizes that the dreams and the pictures come from essentially similar human minds even though from different mental states and cultures. In this regard, in a report published in January, 1940 in The Psychoanalytic Quarterly (Vol. IX, No. 1, pp. 51-63), this author in association with Lawrence S. Kubie, M.D. commented upon the possible correspondence or homogeneity of unconscious understandings in two people of the same culture. In that report, one subject offered a slightly differing wording but precisely the same content as had been worked out *independently* by the subject who did the original cryptic writing in a deep hypnotic trance with no apparent conscious knowledge of its content. The experimenter himself did not know the content of the cryptic writing.

Thus, the common dream symbolism of the mentally ill patients of India and of the United States, the common symbolism in the art work of mentally ill German patients of an earlier era and those of newly admitted mentally ill patients in the United States, the translation of cryptic automatic writing of one hypnotic subject of another subject, along with this report on the Pantomime Technique in hypnosis, all suggest the following: That a parallelism of thought and comprehension processes exists which is not based upon verbalizations evocative of specified responses, but which derives from behavioral manifestations not ordinarily recognized or appreciated at the conscious level of mentation.

In brief, this report on the Pantomime Technique in hypnosis indicates that adequate hypnotic suggestions can be given intentionally without verbalization. It seems reasonable to infer that similar suggestions can also be unintentionally given in pantomime unwittingly to elicit complicated hypnotic phenomena from a subject unacquainted in any way with hypnosis, comparable to the way in which suggestions can be given even when the language, cultural and social usages of the subjects are unknown to the experimenter even as the subjects are unacquainted with those of the experimenter.

Hence, true experimentation in hypnosis should take into consideration far more than the selected items usually tested. When *control measures* are devised, it should be held constantly in mind that their purpose is to isolate the selected items so that their effect may be evaluated without distortion by factors which may not have even been considered nor identified, let alone eliminated or controlled.

The “Surprise” and “My-Friend-John” Techniques of Hypnosis: Minimal Cues and Natural Field Experimentation*

AT A MEDICAL SOCIETY MEETING, a long discussion was presented of hypnosis and its medical applications. At the close, requests for a demonstration of hypnosis were made and two young women and a physician about 45 years of age came up to the platform. One of the young women stated, "I have never been hypnotized and I have never seen it done but I don't think it can be done to me. In fact, I am sure it can't be done to me." The other girl said, "I have never seen hypnosis or been hypnotized, but I would like to be." The physician stated, "I'm an impossible subject. I have spent a great deal of time with several other physicians and dentists trying to go into a trance, but I seem to be blocked against it. I would like to have you try, even though it will do no good. I would like to go into a trance even though I know I can't. I can use and I do use hypnosis on my patients but I am not always sure of the validity of their responses. So I would like to join you on the platform so as to observe better."

He was asked if he were absolutely sure he could not go into a trance. His reply was that he was completely convinced that he could not be hypnotized. A member of the audience then mentioned that he himself had spent a total of approximately 30 hours over a period of time attempting to hypnotize this particular physician with no results whatever.

The girl A (the one who thought she could go into a trance) was asked to sit in a chair to the author's immediate right, the other girl (B) was seated to Miss A's right and Dr. C was placed to Miss B's right but in a chair at a slight angle so that he could easily watch the faces of the author and those of both girls. The author's chair was also at a slight angle to give him a fairly good view of Miss B as well as of Miss A and Dr. C.

Addressing Miss B and Dr. C, the author asked them to watch Miss A carefully, since he intended to use her as the demonstration subject. (This, in essence, was intended as a potent but indirect and unrecognized suggestion to Miss A. To Dr. C, the author explained in somewhat elaborate detail that he was to exercise his most critical judgment and thus to determine for himself whether or not the various hypnotic phenomena manifested by Miss A were valid in his eyes. (This too was a potent suggestion to Miss A and it also defined Dr. C's role so that he need not feel resistances.) To Miss B, the author remarked that she would undoubtedly enjoy watching the manifestation of hypnotic phenomena, *even though she would not understand all* (with special emphasis on these words) of the hypnotic phenomena that she would see. (Again Miss A was being instructed without my seeming to be doing so and Dr. C was being informed that there would be more than would be comprehended, presumably by Miss B.) The emphasis, very intense, upon the italicized words gave also an indirect suggestion that she and she alone of

*Amer. J. Clin. Hypn. 6, 1964, 293-307.

the three would see "all." None of the three would understand that emphasis at a conscious level of mentation, but all three would hear it and it would leave an unanswered, though unrecognized, question in the minds of all of them which could be utilized later.

To Miss A, the statement was then made that the hypnotic trance was based entirely upon learning processes within the subject; that it involved the utilization of the unconscious mind and *automatic processes of response*; thus there were given openly but indirectly instructions heard by A, B and C for "automatic responses." It was stated that there were a *number of techniques* that could be employed and that *some of these* would be described briefly to her so that the *audience* would benefit from the reviewing of the various techniques, an unrecognizable implication that B and C were going to be excluded in some way.

There followed then a seemingly casual but rather full summary of the hand-levitation technique, the spot on the wall and eye-enclosure technique, two variations of the coin technique, followed by an explanation of the technique I had previously developed and, in the mid-50's termed jestingly "My-Friend-John Technique." In this, I explained elaborately, a person pretends that someone by the name of John is sitting in a chair and he gives to that imaginary person, with much feeling and quite intense emphasis, the suggestion of the hand-levitation technique, sensing and feeling his own instructions and *making automatic responses to his own suggestions* in much the same way that one tries to say for the other person the word for which that person seems to be groping. Thereby, one learns the "feel" and the "timing" of suggestions. In a typical instance, the person tells "My Friend John" to sit comfortably in the empty chair, to place the palms of his hands lightly on his thighs, demonstrating this as the instructions are given and then there are offered slowly and carefully, with full meaningfulness and intensity, the suggestions of finger, hand and wrist levitation, the bending of the elbow, each step being illustrated by a slow continuing demonstration of such movements as the suggestions are given. Then it is added that as the hand approaches the face, the eyes will close; that when the fingers touch the face, the eyes will remain closed, a deep breath will be taken and a deep trance state will accompany the taking of that deep breath and that the trance will continue until the purposes to be accomplished are achieved. This is a technique the author has employed in teaching others, and in teaching autohypnosis to others for some legitimate purpose.

All three subjects and the audience listened with complete concentration to this rather extensive explanation. Then, in continuation, the author said, "And now Miss A, since you are to be the demonstration subject, I would like to use a rather simple technique on you that is often very easy and rapid and which I call the 'Surprise Technique.' It is really very simple. All I want you to do (speaking with quiet intense emphasis) is *to tell me what kind, what breed, about what age is that dog there*" (pointing with his extended finger to a bare spot on the platform and looking with great intensity of interest).

Slowly Miss A turned her head, her pupils dilated, her face showing a rigidity of expression. She looked carefully at the designated spot, and, without turning her head back to me, she replied, "It's a Scottie, he's black, and he looks almost exactly like the one I have at home." Slowly she turned her head back to me and asked, "Is he yours? He is about three-quarter's grown, like mine." She was asked, "Is he *standing, sitting or lying down?*" Her reply was, "No, he is just sitting there."

Miss B's face was expressive of marked amazement as she looked first at Miss A and then at the bare spot on the floor. She started to say, "But there is no—" and her facial expression changed to one of complete bafflement as she turned to Dr. C and heard him say to the author, "That is not a valid hypnotic response. The dog is a collie and not a Scottie and he is standing up and wagging his tail. I'm a collie fancier myself and I ought to know. How do you suppose she got the idea of a Scottie since you didn't suggest it?"

Placatingly, the author explained that possibly Miss A did not know the breeds of dogs any better than the author did and he asked Miss A to explain to Dr. C what kind of dog it was, *pointing to Dr. C* (thus insuring rapport between the two. Slowly, Miss A turned to Dr. C and as she did so, Dr. C said, "Her facial expression, her head movements are hypnotic, but that seeing a Scottie instead of the collie—oh, she is hallucinating the collie as a Scottie." As he was making these observations, the author demonstrated catalepsy in Miss A's left arm, an item she did not seem to notice. Dr. C noted this and affirmed it to be genuine catalepsy and completely valid. While he was making this statement, the author slipped out of his chair and stood behind Miss B and whispered to her that she should attempt to force Miss A's arm down. She did so but received no response from Miss A except an increased rigidity which Dr. C noted by saying, "Her arm catalepsy is becoming more rigid," speaking to the author as if the author were still sitting in the chair beside Miss A. Nor did he give any evidence that he saw Miss B and what she was doing, nor did Miss A seem to see or note Miss B's act. Neither did Miss A seem to give attention to what Dr. C said to the author nor did Miss A note the author's departure from his chair.

Slowly Miss A explained to Dr. C that the dog was a Scottie, explaining fully why it was a Scottie, and she apparently knew a great deal about that breed.

Dr. C disputed her very courteously, pointing out that the dog was a collie, in fact, that it resembled one to a marked degree that he had once owned. Dr. C made several side remarks to the author as if the author were still sitting in the original chair, commenting on Miss A's trance as valid, but to these remarks Miss A gave no evidence of hearing since they were not addressed to her. While this exchange between Miss A and Dr. C was continuing, as well as the side remarks to the author as if he were still sitting in the original chair, the author had stepped over to Dr. C's right side, lifted his right arm up and left it in an awkward cataleptic position. Then with his left arm, the author reached over in such a fashion that the audience could see but Miss B could not, and gave a lock of Miss B's hair a sudden jerk; at just a later moment, with his right hand he gave a similar sudden, even harder, jerk to a lock of Dr. C's hair. Miss B looked up at the author in amazement, too startled to say anything, but her facial expression was one expressive of pain. As she looked up, she saw the yanking of Dr. C's hair. Immediately she looked at Dr. C's face, and saw no evidence that he had felt the pulling of his hair but was continuing his argument with Miss A about the identity of the dog. (Miss B was beginning to see *all* the hypnotic phenomena, so she thought.) The audience was now well aware of the fact that Dr. C had unaccountably and inexplicably developed a profound somnambulistic trance. He remained completely unaware of the audience and of Miss B and continued apparently to see and to address the author as if he had not changed his position. Miss A also continued to react as if the author were beside her.

Reaching down from behind, the author took Miss B's left hand and moved it back and up and nodded his head toward Miss A's head. gingerly, Miss B took a lock of Miss A's hair, gave it a tentative tug, and then several much harder tugs without receiving any response from Miss A and without interrupting the obviously interesting discussion Miss A and Dr. C were having about collies and Scotties. Nor did Dr. C notice this; in fact, neither Miss A or Dr. C seemed to be aware of Miss B, an item of fact bewildering to her and most obvious to the audience.

At this point, the author began speaking to the audience from behind Dr. C, explaining what had happened. Everybody including Miss B noted that the author's speaking to the audience did not interfere with Dr. C seeing and to speaking to the author even while the author was addressing the audience. Dr. C continued to discuss Miss A and her behavior, speaking as if the author were still in the original chair, and was unresponsive to the sound of the author's voice as he addressed the audience. The author offered the explanation to the audience that, although they had witnessed in full an orderly systematic trance induction, they did not know that they were so doing, and that they were merely overlooking what was being done while waiting for the author to do something else more in accord with their general expectations. (Miss B heard this, too, but made no apparent personal application of the remark to herself.)

It was explained that the seemingly *casual incidental explanation of various trance inductions* was only an easy way of capturing effectively the attention of the subjects and narrowing down their field of conscious awareness. But since the audience was there *to hear* and *to see* what the author as well as the subjects were doing, they had at least some mental counter-set for any trance induction for them at the time. At this point, one of the audience raised his hand and, when nodded permission to speak, he declared that "the counter-set was not sufficient for me, because I saw *my boat* there instead of a dog, and that surprised me so much that I *came back* to the audience again. But I suppose I did have some counter-set, as you call it, or I wouldn't have come back." (Later several others approached the author and reported that they too had hallucinated but only momentarily and then "returned" to watch anew the demonstration.)

The author continued, "Then when I explained 'My-Friend-John Technique,' I was careful to emphasize the importance, in inducing hypnosis, of speaking slowly, impressively and meaningfully, and literally to "feel" at the moment within the self the full significance of what is being said. For instance, in my own use of the hand-levitation technique, I soon learned during the process of developing that technique in my University of Wisconsin days that I almost invariably would find my hand lifting and my eyelids closing. Thus I learned the importance of giving my subjects suggestions in a tone of voice completely expressive of meaningfulness, expectation and of "feeling" my words and their meanings within me as a person. When Dr. C volunteered and gave his own history of personal disappointment about being hypnotically induced, and then had spoken of his doubts of the validity of the hypnotic phenomena his subjects manifested, I recognized this statement by him as one of genuine interest and significance to him. I also recognized the opportunity it afforded to me to develop what might be called a 'natural field experiment' where nobody, especially neither the subjects nor the audience, could anticipate what would happen, nor could the subjects, who were strangers to me, conceive that an experiment might be done or even to conceive of what the experiment would be nor even what the behavior would be that might develop. For that

matter, *neither could I predict it.* All I knew was that I wished to demonstrate hypnotic phenomena, that I would try to utilize experimentally whatever phenomena I could elicit, and that I would rely on my knowledge of possible responses to my choice of words, emphasis and inflections to formulate my experiment 'on the spot.' If the experiment failed, nobody would know, and I could try other variations since I could be reasonably certain of securing at least one hypnotic subject and some hypnotic phenomena, even if I did not know exactly what they would prove to be.

"My-Friend-John Technique is an excellent measure of teaching resistant subjects to go into a trance. I demonstrate it to the resistant patient who comes for therapy but resists, and I demonstrate it so thoroughly and carefully that as he watches me induce a trance in my purely imaginary friend John, he resents so much the waste of his time and money, and becomes so unwittingly responsive while I am hypnotizing "John," that he follows John's example and develops a trance without needing to offer resistance. This, therapeutically, is an excellent beginning since he came for therapy and not a contest. I use it also to teach self-hypnosis in the hetero-hypnotic situation, and with subjects who are to rehearse at home in relation to study, migraine, obesity, etc.

"Therefore, when Dr. C spoke of his doubts of the validity of trance phenomena, I asked him to pass judgment upon the validity of Miss A's trance manifestations. While this was a comprehensible statement to him, it was also an absolute, direct, simple but emphatic declaration that Miss A was going to go into a trance and there was no way for her to resist or dispute or even to question that statement since I had not spoken to her but to Dr. C. But it was also a statement rendering him responsible for the task of evaluating Miss A's behavior adequately. What this implied, neither he nor the audience had time to analyze. I was relying on my past experience. How does one validate another's subjective experience? By participating, if possible! For example, the swimmer says the water is cold. One can dive in and find out, or at least put in a finger or a toe! But the situation here was different. One cannot validate any hypnotic hallucination, as one can a swimmer's subjective reaction to the temperature of the water. But Dr. C felt 'blocked' about hypnosis for himself and in doubt about the 'validity' of some of the hypnotic phenomena he himself elicited in his own practice. He was not 'blocked' on the possible validity of hypnotic phenomena, nor was he 'blocked,' to use his own words, when he was asked to 'validate' the genuineness of Miss A's hypnotic behavior. He expected hypnotic phenomena from Miss A and to validate them by his cooperative critical effort. Neither he nor the audience realized that the suggestion that his effort to validate Miss A's hypnotic behavior required much more than a mere tentative questioning of the *age*, the *kind* and the *breed* of a dog, the actuality of which was not the issue, *just its attributes*. To do such validating necessitated a dog since Miss A had hallucinated one; therefore Dr. C, who had had no mental block or counter-set against validating Miss A's responses, found that the only way he could 'validate' her judgment as to *kind*, *breed* and *age* was to have a dog by which to make such a comparison. Hence, he was unwittingly placed in the same situation as Miss A had been and neither she nor he nor the audience had time to realize this nor to analyze the manifold implications of that seemingly simple request to Dr C that he *exercise his very best judgment evaluating Miss A's responses*. His "very best" required his full potentials.

"Then, with Miss A in a state of complete expectation, merely awaiting what-

ever suggestion I chose to give her, I mentioned the 'Surprise Technique,' I did not ask her to see a dog. I just asked her to *tell me the kind, the breed, and the age of that dog there.* It was not a question of whether or not a dog was there. The question was *kind, breed* and *age*, and since she was prepared to accept my suggestion, her only way to do so would be to 'reach' into her unconscious mind and thus to project vividly a visual memory of a dog. To do this she had to go into a trance. How long does it take to develop a trance? How long does it take to develop physiological sleep? If you are sufficiently tired physically, you can fall asleep as your head hits the pillow. When you are sufficiently prepared psychologically you can develop a trance just as quickly.

"As for Dr. C, what happened? He was adequately prepared for the development of hypnotic phenomena by Miss A. He actually fully expected the author to demonstrate hypnosis. He had stated that he could not be hypnotized and his statement had been apparently accepted at face value; thus he had no need to offer any resistances. But he did have a task to do, which was *to cooperate with the author by judging the validity of hypnotic phenomena he expected Miss A to develop.* He too, had a strongly expectant state for hypnotic phenomena, and he merely assumed that they would derive from Miss A, possibly from Miss B. He did not even recognize that he, too, might be a source and hence, he had no need to offer resistances. Instead, there was a long history of intense wanting and striving to achieve hypnosis, and now an unrecognized opportunity to achieve. The whole psychological situation favored the author's hopes.

"Then when Miss A hallucinated a dog, Dr. C found himself in the position of validating that hallucination. How does one validate? Naturally by a comparison of the thing in question with a known comparable thing. One does not compare a dog, even an imaginary dog, with a carpet, a floor or a chair but with another dog, or a mental image or a memory of one. Hence, Dr. C, without ever realizing it, was forced into the situation of comparing Miss A's projected visual image with his own inner understandings and this was best done by a projected image of a dog of his own memory. To do this, (and he was ready and waiting to do it but he had not analyzed the processes by which it would have to be done), he promptly developed a trance state and thus he could make a comparison of his own trance visual hallucination with Miss A's verbalized description of her subjective hypnotic experience. The fortuitous circumstance of the comparison of a Scottie and a collie gave rise then and there for an elaboration between them of the situation, and this occurred, aided by incidental remarks by the author, unplanned and arising out of the situation itself.

"Why a dog? Because general information indicates that dogs are much more commonly liked and owned than cats. But if Miss A had used a cat, Dr. C could still have used his collie if he preferred dogs, as *many repetitions of this particular experiment have revealed.* Subjective experiences were to be validated, not an object in reality, and Dr. C met the task imposed by Miss A, a subjective experience, adequately but in terms of his own visual and mental images and memories.

"I like to do this type of experiment when nobody knows an experiment is being done and when I myself do not know what will happen. Thus, I have in the past carefully given suggestions directed to elicit visual hallucinations, and secured auditory ones; e.g. 'I can't see anybody there but I can hear people talking'—(there were no people and no talking); also I have suggested that they listen to *that*

piano there and had them explain, in bewilderment at my ignorance, 'That is an electric organ.' And the subject sees me take a closer look, thus to correct my 'obvious mistake'."

All that I hope to know in most such experimental situations that I devise is the possible general variety of psychological processes and reactions I would like to elicit but do not know if I shall succeed in so doing, nor in what manner this will occur. Then, as the subject responds in his own fashion, I promptly utilize that response. To illustrate from another medico-dental lecture-demonstration situation, in discussing ideosensory phenomena, I asked my intended hypnotic subject, a college graduate, her favorite recreation. She answered, "Well, I suppose it is driving about the country and enjoying the landscape." (She lived in Colorado.) Therefore, I suggested that she might look "out of the side window over there at *that mountain range and at that mountain* with the *two deep ravines*, one on each side, and the *v-shaped pine forest* running up its side," pointing impressively at a bare wall. To my astonishment and that of all the others present, she replied, "That's not a car window. That is my kitchen window and that's me washing dishes and listening to the hi-fi. It's playing my favorite piece, the one that reminds me of skiing," and she began a soft humming, interrupting that to explain to me, "Doesn't that music remind you of skiing down the mountain following those long, lovely curves, just like the long, lovely sweeping tones of the music on the hi-fi. And oh my goodness, that's impossible, but if you look out of the window you can see the mountain where we always go skiing. And it's close enough so I can see it all. Look at that huge boulder that the ski trail curves around. Please, may I have some paper and pencil, I must sketch that scene." This she did, glancing up from the paper from time to time to check her "visual impression" of the "scene."

This subject was the wife of one of the dentists in the audience. He had often attempted, but futilely, to use hypnosis on her for dental work, and his colleagues had had similar failures on her. She had come to the meeting in his company only after making him promise that she would not be used as a subject. The author, in seeking volunteers for demonstration purposes, had asked "the pretty girl wearing the white hat in the back row" to come up to the platform. She had done so but explained immediately that she did not want to be hypnotized. She was earnestly assured that she ~~need~~ not go into a trance unless she wanted to, but that the author liked to have a number of volunteers when he demonstrated hypnosis, some to demonstrate the ordinary waking state, some to demonstrate the light trance, the medium trance, and the deep trances as well as varying types of hypnotic responses. She readily volunteered to be a "waking demonstrator." This offer was accepted and she was told that, since her husband used hypnosis, she might like to watch the other subjects who had volunteered and to watch the reactions of the audience as they observed the demonstrations and reach understandings of how to talk to their patients to convey meanings effectively. As she alertly watched both subjects and the audience and listened to the author's emphasis upon saying things meaningfully, he explained that Mrs. X was as wide awake and alert and unhypnotized as would be any new patient who entered the office unsophisticated in hypnosis. In the dental office, a remark appropriate to the situation could be said as earnestly as the author, in his discussion of ideosensory phenomena, could turn to Mrs. X and make a seemingly casual remark, or ask a seemingly casual question to effect a

surprise technique induction as he would now demonstrate. It was at this point that the author put his question about her favorite recreation, by which there was elicited a succession of hypnotic phenomena at the ideosensory level in a somnambulistic trance.

What did Mrs. X's behavior signify? She was interested in hypnosis; she was interested in what was being said to the audience; and she was interested in what they were understanding. This the author recognized would be the case and, at what he judged the right moment, he explained what he was going to do and she, in her own wish to cooperate, did so but purely in terms of her own experience. She did not accept the suggestions offered her by the author; she accepted only the opportunity offered to reach understandings in her own way, taking advantage of the author's suggestions as a means but nothing more.

She was allowed to finish her sketch and then she cooperated in demonstrating various other phenomena of the somnambulistic trance. The sketch was passed to the audience, her husband and several others recognized the scene (she had done much sketching and painting) and she was then awakened by the simple process of leading her to the edge of the platform where she had come up, and saying to her, "And now, *you in the pretty white hat*, what is your name?" This had the effect of reorienting her to the moment at which she had arrived at the platform with a consequent amnesia for all trance events. (This measure of reorientation in time by reawakening trains of thought and associations preceding trance inductions, in this author's experience, is far more effective in inducing post-hypnotic amnesia than direct forceful suggestions for its development. One merely makes dominant the previous thought patterns and idea associations). She was asked to take a seat, a different one than that which she had previously occupied, thus to preclude any chance reassessments.

She was questioned indirectly by the audience. People whom she did not know asked her about her hi-fi set, others about her skiing, the boulder around which the ski trail curved, and finally she was shown her sketch while the author sat back passively. She was bewildered by the questions but showed no evidence of any recollection of trance occurrences, and when shown the sketch, she named the area, spoke favorably of the excellence of the sketch and was suddenly very startled to see her name signed to it. At first, her facial expression was one of complete bafflement and blank surprise; then she looked at her watch, listened to it, compared it to the watch of the girl next to her and then turned to the author and asked simply, "Have I been in a trance?" Her question was answered with a simple affirmative.

She paused thoughtfully, then looked at her husband with a pleased smile, and said, "Everybody will soon know so I am going to tell it now. I'm pregnant now and I want to have my baby under hypnosis but I was absolutely convinced I couldn't be hypnotized. I always tried so hard to go into a trance and I always failed. I didn't want to come today for fear my husband would want me to volunteer and I didn't want to fail again. So I stuck close to him and even made him come late so he wouldn't have a chance to ask you to hypnotize me. I just couldn't take another failure. But when you asked me to come up and mentioned my hat I knew it was just a coincidence and I was relieved when you told me I could demonstrate being awake. I knew I could do that. But what happened? Can you put me in a trance again so that I can have my baby under hypnosis?"

She was told simply that she did not need to have anybody "put" her into a trance, that it was a process of learning within herself, that all she needed to do to go into a trance was to look at her sketch and to arouse, by reading her name. Another way would be to listen to the hi-fi, even though it were a hundred miles away, and go into a trance and awaken at the proper time. She promptly picked up the sketch, obviously developed a trance, slowly looked downward at the signature and aroused, and apparently realized she had just aroused from a trance. Then she cocked an ear as if listening, her eyes closed, she started to beat time with her foot, her husband remarked, "She's keeping time to her favorite piece." Shortly, the beating stopped, she awakened, thanked the author most graciously and, picking up her sketch, left the platform and returned to her seat beside her husband as if she had no further contribution to make.

Two years later, when lecturing to that same group again, she was present. She introduced the author to her baby, and explained that she was a perfect obstetrical and dental patient, an item of fact her husband confirmed.

Now back to Miss B: after having demonstrated and discussed matters at length to the audience, to which Miss B tried to listen while listening also to Miss A and Dr. C still discussing the merits of Scotties versus collies, there is another item to be taken up. Turning to Miss B, I said, "When you came up, you said you didn't think you could be hypnotized. Now what I'm wondering (note that 'wondering' has nothing apparently to do with her going into a trance) is, what you would like to see, a dog?" ("Dog" was said with a rising inflection as if to cast doubt on seeing a dog, since, if there is going to be any doubt, it should be mine and not that of the subject). She laughed and said, "No, I'm a cat lover, and I have one named Snookie."

"What is cute about Snookie?"

"Oh, you ought to see Snookie playing in the living room."

"Oh, is that Snookie there, playing with that catnip mouse?" pointing again and looking intently at the bare floor as if I actually saw the catnip mouse.

Again the suggestion was worded in such fashion that the question as understood by Miss B was not "Is there a cat?" but "*Is that a catnip mouse being played with?*" To answer that question, *she had to see a cat first*, and the preceding conversation had set the stage and had evoked strong personal memories.

She answered that it was *not* a catnip mouse, but a *ball of yarn*. Again, a Surprise Technique was used by asking a sudden question in a suitable situation, reply to which required an absolute affirmation of a postulated or implied hypnotic phenomenon in order to answer the question. One can speak to a stranger and say, "Here is a blackboard and a piece of chalk and if you don't mind, I would like to know if you are right- or left-handed." Even if a verbal answer is given instead of accepting the chalk with the dominant hand and writing, there is certain to be some involuntary motor response such as looking down at the dominant hand or a slight revealing movement will be made. This will occur even if the stranger gives otherwise only a cold blank stare.

After various further demonstration of hypnotic phenomena, using all three subjects, with all three in rapport with the author, Miss B directly, and Miss A and Dr. C with hallucinatory overtones, Dr. C and Miss A in rapport directly with each other only, and Miss B in rapport with the author only, the next problem was that of arousing them.

Resuming his original seat, the author propounded the task to the audience as, "Now comes the problem of arousing them. You will all note that I apparently will not do so, therefore I urge you to watch the subjects carefully, to listen carefully to what I say, and to speculate upon the implications."

Turning to the subjects, the author remarked casually but with veiled emphasis, "Well, Miss A and Miss B and Dr. C, since *we are all here* and the *audience is waiting*, don't you really think *I ought to begin* the demonstration for them?"

All three aroused at once, but *reoriented to the time of their original arrival the platform*. Miss A smiled and said, "Well, I suppose since I'm the only one who wants to go into a trance, you had better start with me." Miss B, when I glanced at her, said, "I'm willing to try," and Dr. C answered, "I wish I could."

Obviously, all three had a total amnesia for all trance events. An arousal, a reorientation in time and an amnesia were all definitely implied by the three italicized statements in my remarks to all of them.

A stranger asked Dr. C, "Did you ever have a favorite collie?" Dr. C replied that he had had many favorite collies but of them all, he liked best one that had died some years previously. Someone then said to Miss A, "So your favorite dog is a Scottie!" Her startled reply was, "How did you know that?" Another member of the audience who did not know Miss B asked her why she had never bought Snookie a catnip mouse. Immediately Miss B replied that she had, but that Snookie had torn it up. Then, with startled bewilderment, she inquired how the speaker knew about Snookie.

Dr. C had looked puzzled at the question about a collie, listened with bewilderment to the questions put to A and B, suddenly looked at his watch, and remarked in a bewildered fashion, "There's more than an hour gone by since I came up here. Everybody seems to know personal things about us; none of us seem to understand how they could be known. Does that mean that we all have been in a trance, and have amnesia for it?" looking toward the author.

Instead of answering him the author addressed the audience by saying, "Of course, the best answer to that question will be a *levitation of the right hand*." The three subjects appeared nonplussed by this seemingly nonpertinent statement.

Dr. C was the first to note his responding right hand levitation, then looked at Miss B and Miss A in obvious amazement since they too were showing the same phenomenon. Their facial expressions were those of startled amazement when they too saw what was happening. Then the question was asked, while the author looked at the back of the room, "Can you stop it?" All three noted their hands continuing to levitate. Then several in the audience noted the same thing occurring to them. Then the author remarked casually, "Thus, one can get answers unknown to the self in various ways." To everybody's astonishment, all levitation ceased and the raised hands dropped. The implication of the author's remark was that full reply had been made, hence, there was no need to give further instruction. Astonished comments were received from several of the audience who discovered their own right-hand levitation.

In a somewhat comparable way, the author, before an audience of visiting physicians, the state hospital staff, medical students, registered and student nurses, had asked a student nurse to volunteer as a subject. She had demurred, stating she would like to but that she was too self-conscious to come up in front of so large an audience. To this the author replied, "So you would like to (true), you are too

self-conscious to come up *in front of the audience* (nobody realized THE *implication* of those italicized words, and the statement was also true) but *that is all right*, all I want you to do is, Just look at *that picture right there* on the wall and I don't know *whose it is* nor in *what room* it is (pointing and looking intently at the bare auditorium wall). Slowly the girl turned her head in the fashion of a deeply hypnotized subject, looked at the auditorium wall, and answered, "That's Lily's picture and it's hanging right over the television set in her living room." I asked the nurse to come and sit beside me and to tell me about Lily. She came down the aisle, and after a few remarks, I asked her to close her eyes and to help me with some work I had to do. After demonstrating various other phenomena, including a discussion of the Surprise Technique, I aroused her.

Her startled reaction was delightful to behold and she asked, "How did I ever get up here?" Reply was given, "You are a remarkably good hypnotic subject and you will be able to teach the doctors and nurses here a lot. Later, a correspondence with her revealed that she had asked for a full account from her fellow students, found it difficult to believe, and hence, wrote to the author asking for a summary. She was most pleased with her experience. In explanation, her actual willingness to be a subject, her unawareness that her seat in the audience would not be a barrier to hypnosis, although the request to "come down in front" implied that it was, and the burden so inexplicably thrust upon her to place a meaningful value upon an actually meaningless suggestion compelled her to construct, by an outward projection, a meaningful response through the measure of entering into hypnosis and the visual projection of an actual memory.

Another example which may be cited of the Surprise Technique is of a slightly different character in that it depends upon the utilization of minimal cues entirely. This instance was a completely impromptu experiment before a medical and psychological group in a university auditorium most of whom were sophisticated in relation to hypnosis, although some had no knowledge of it. Minimal cues not recognized by the audience nor by the subjects were used to elicit both a deep trance state and specific responses for which no recognizable cue had been given that was apparent to the audience, and to which the subjects had to make a rather unusual response inexplicable to both the audience and to the subjects until demonstratively proved.

The situation was as follows: The author upon entering the auditorium by way of the door at the front of the room noticed by chance some colored chalk just behind the speaker's stand on top of the desk behind which the speaker could stand, and a blackboard on the wall behind the desk. No further thought was given to this at that time. Instead, the author looked carefully and appraisingly over the audience, as is his customary practice, thus to make note of anything of interest to him. In so doing, near the rear of the auditorium, he saw two young women, one just slightly further back than the other, one on one side of the room, the other on the opposite side. Both girls' absorbed and attentive faces led to his clinical judgment that they were "good hypnotic subjects."

The author was not scheduled to speak but he did take a seat in the front row in order to observe the speaker of the occasion who was to discuss hypnosis and to demonstrate trance induction with a trained subject.

At the conclusion of the presentation, the author was asked if he would offer a few comments. Since the demonstration had proved decidedly unsatisfactory, even

from the speaker's point of view, the author accepted the invitation. In his comments, he spoke adversely about the direct, emphatic and authoritative suggestions that had been employed and indicated that no real effort had been made to meet the subject's seeming uneasiness and self-consciousness in being before an audience or his possible resentments or resistances toward the autocratic way in which he had been handled. The author stressed the importance of *gentle, permissive* and *indirect* suggestions, emphasizing that *direct* suggestions may give rise to resistances.

The author's comments were somewhat resented by the speaker, perhaps because he felt "let down" by his hitherto cooperative subject. At all events, the speaker suggested rather insistently that the author demonstrate "a gentle, permissive approach and indirect suggestions" and that he choose someone from the audience as his subject. Rather reluctantly, the challenge was accepted and then it was realized that there might be the possibility for an experimental procedure of which only the author could possibly know in general what he *hoped* could be achieved. It was an excellent setting for a natural field experiment with only the author cognizant of his intentions, and under observation by the entire audience, some of whom were not too friendly. Immediately, the author had three chairs placed in a row in front of the desk. Most emphatically he stated that the middle chair was *his* since he preferred to lecture while sitting down because of his residuals of anterior poliomyelitis. With no explanation, the author took two handkerchiefs out of his pocket and stepped around to the rear of the desk. There, with his hands and their activity completely *out of sight of everybody*, two pieces of colored chalk were selected and rolled up separately in the handkerchiefs and then one of these handkerchiefs was placed on the floor to the left of the left-hand chair and the other on the floor to the right of the right-hand chair. Even if anybody knew about the colored chalk, nobody could know which pieces had been selected and wrapped up in the handkerchiefs. Upon sitting down in the middle chair, the author took hold of his right wrist with his left hand and lifted his right (and obviously weaker but not that weak as was made evident later) arm over and indicated with his right hand that "this chair is for one subject," and, dropping his right hand in his lap, he touched the right hand chair with his left hand and said, "And this chair is for the other subject." No explanation of any sort was made of the peculiar placing of the handkerchiefs or this crossed-arms designation of the chairs.

Thus, everybody had seen a number of things done that could cause wonderment, intense watchfulness and bewildered attention. There was the placing of three chairs with the middle one specifically identified as the author's, and the other two designated in an inexplicable manner as the chairs for two unspecified subjects. Then there was the remarkably odd item of handkerchiefs rolled up as if containing some unknown objects secured by the author in full view except for his hand activities and so peculiarly placed with no proffered explanation.

Then I began to discuss as lucidly and as informatively as I could the nature and values of soft gentle indirect permissive techniques, the use of inflections and intonations, of hesitations, pauses, of a seeming groping for words to elicit efforts to speak for me and of the giving of minimal cues and hints that the subject could cooperatively elaborate and act upon. I mentioned that I had already specified that there were two chairs for subjects and that I had said "that one subject would sit here," again indicating the left-hand chair by using my left hand to move my

right hand over to it and "that the other subject (touching the right-hand chair with my left hand) will sit here." Thus, twice I had touched the left-hand chair with my right hand and the right-hand chair twice with my left hand. Although the audience was most attentive, as later questioning disclosed, no one placed unduly remarkable meaning upon this twice-done crossed-arms designation of the subjects' chairs. Yet everybody saw it, and, as many later stated, related it to the more easily comprehended physical handicap of the author, so gratuitously mentioned.

Throughout my comments, I was exceedingly careful to let my eyes roam constantly about the room in what appeared to be purely random fashion, glancing at the side aisles, following them with my eyes from in back of the room to down in front of the room, looking at the floor just in front of me and also further distant up the middle aisle, at the walls, the ceiling, the "No Smoking" sign on the righthand wall, the chairs beside me, the window on the lefthand wall through which I could see a tree. Nobody could realize that as I paused for words, looking here, there and everywhere that I was careful to look no member of the audience directly in the face with two exceptions: the two young women I had first noted. The impression was given that I was looking freely and comfortably at everybody and everything as I talked. Nor did anyone become aware, because of the randomness of my behavior and utterances with meaningful content, that it contained two separate rigid sequences. One of these sequences was looking out of the left wall window, shifting my gaze to look directly at the girl's face and eyes on the lefthand side of the room, at the same time so choosing my words so that I would be saying something like "a minimal cue means to you—" or, "as permissive suggestions are given, you—," always something that could be taken personally, following such utterances with a visual following down of the left side aisle to the front of the room and over to the righthand chair, although seemingly I was addressing all of this to the entire audience. The same sort of sequence was used with the girl on the righthand side. Each time I looked at the "No Smoking" sign, I glanced at her face and her eyes, making suggestions comparable to those given to the other girl; for example, "When you receive a suggestion however given, you will act upon it," or, "Minimal permissive suggestions to you can be highly significant," and this would be followed by a careful visual following of the righthand aisle down to the front of the room and over to the lefthand chair. By repetition, every effort was made in these remarks, seemingly addressed to the entire audience, to give both girls a sufficient number of the *same* wholly comparable suggestions. Thus, the audience in general had a feeling of being spoken to and looked at as a group, but the direct look at the girls and the use of the pronoun "you" had an unrecognized, unrealized but cumulative effect, and the sequence of events was consistently the same for each girl although at irregular intervals.

Finally, I felt from the rigidity of their facial expressions and the failure of their blink reflex that all was ready. I stood up and walked up the middle aisle to the second row of seats, and glancing at the "No Smoking" sign and then at the girl on the right, saying slowly, "Now that you are ready—," pausing, taking a deep breath, slowly shifting my glance to the backwall, then looking out of the window on the left side of the room, then at the girl in the left side, again saying, "Now, that you are ready—(a pause)—slowly now stand up and walk down and take your proper seats."

The audience looked all around, was startled to see the girl on the left and the

girl on the right arise, walk slowly down the side aisles while the author stared purposely and rigidly at the rear wall. Behind his back, the two girls passed each other, the one from the right taking her place in the lefthand chair and the girl from the left seating herself in the righthand chair. When I judged them as having reached their chairs by the stopping of their footsteps, I said very gently, "As you sit down, close your eyes and sleep very deeply and continue to sleep in a deep trance until I tell you otherwise."

After a brief wait, I turned and sat down between them and remarked to the audience that I had asked the two girls to sit down in the *proper chairs*. To indicate that they had responded correctly, I then asked the speaker who had asked me to demonstrate indirect trance induction and indirect suggestions to prove that they had seated themselves in the appropriate chair. As he looked blankly at me, I asked him to examine the handkerchiefs beside each chair. He unrolled the handkerchief beside the left chair, he found a yellow piece of chalk, and the girl was wearing a yellow dress; the chalk in the handkerchief beside the righthand chair was red and so was that girl's dress. To get to the *proper chair*, the girls had each had to go to the further chair, and, in so doing, to pass each other behind the author's back while he was rigidly staring at the rear wall.

Various phenomena of deep hypnosis were elicited from each, and they were then aroused from the trance state by simple suggestion. They manifested an amazed startle reaction at finding themselves in front of the audience, and questioning from the audience disclosed that each had a total amnesia for all trance events including rising from their seats, coming to the front of the room and sitting down in the chairs.

Systematically, they were questioned by the audience, and both explained that something, they knew not what, made them feel that they were being personally addressed by the author and that they had unaccountably found themselves taking an inexplicable interest in the chair in which they now found themselves sitting.

They could give no reason for these statements. Even when another trance was induced in them, they could only state that the author in some way gave them a definite feeling that they were to go into a trance, but they could not tell what it was that gave them that feeling. They did state that the elaborate but inexplicable behavior with the handkerchiefs had captured and fixated their attention. Upon being asked why that had been done and for what purpose, they looked beside the chair to see whether the handkerchiefs were still there. (While they were still in a deep trance, Dr. X had returned the pieces of chalk to their original place and the handkerchiefs to the author.) Dr. X then retrieved the chalk and stated, "These were wrapped up in the handkerchiefs." Each made the feminine response of saying "And I am wearing a red (yellow) dress so the red (yellow) chalk was by my chair! But I didn't know that, I didn't even know there was chalk. Did anybody else?"

Only the author knew. Much discussion followed but it was not until the tape-recording was played back repeatedly that the two girls, who were graduate psychology students were reminded by the repetitious sequence of certain utterances and of their memories of the sequences of the author's visual behavior. Soon various of the rest of the group could also recognize the rigid sequences they had previously ignored. Unfortunately the girls were not tested separately, but their recognitions were first of the sequence directly applicable to the self and then for the sequences directed to the other.

Suddenly one of the girls said, "But you can move your right hand more freely than you did when you forcibly lifted your right hand and put it on the left chair, and then elaborately leaned over to put the left hand on the right chair. That crossing-over was a cue too."

Item by item, they reviewed the tape-recording noting the extensive repetition of ideas which should have made the lecture boring, and they reached the conclusion that the unanswerable puzzle of the meaningfulness of the handkerchiefs had served a large role in keeping everybody's attention at a high level and the entire audience agreed that this was possible. It was also noted that there were many variations in the utterance of the same ideas. The author's own tension also unquestionably played some role.¹

Later that day, each girl requested a direct hypnosis of the self while the other watched, speculated, and discussed the phenomena under observation.

Actually, while this experiment was a surprise technique, not only to the subjects but to the audience itself, it was simply a matter of systematically combining auditory, visual, and intellectual conditioning of the subjects to elicit certain pre-determined responses knowable only to the author. The tape-recording of the demonstration was played to determine if the words "red," "yellow," "walk down" or "girls" or "girl" had been used. They were missing from the tape-recording even as were the words "chalk" and "color."

One additional comment should be made, and that is that this sort of seemingly casual conversation loaded with minimal cues has many times been practiced by the author and his oldest son, sometimes on each other, more frequently upon others as a definite game or means of entertainment by enjoying intellectual ingenuity.²

One final paragraph might be added. To the unsophisticated onlooker, ready to believe in mind-reading, thought transference, the power of mind over matter, and the "dominance over the will" of another, the above material could deliberately and fraudulently be made to appear as evidence of such; or it might even be innocently so interpreted by an uncritical lecturer or experimenter unaware of the many minimal cues given unwittingly by the naive but honest worker.

Examined carefully, observed in full detail by the astute critic, no more was done than to utilize the experimental learnings and the innate capacities of the individual to receive and to accept and to act upon stimuli, recognizable and understandable to others but ordinarily overlooked and not appreciated.

They constitute, however, important and often decisive factors in the actions and adjustments made constantly in daily life even though these cues and minimal stimuli may not reach the level of conscious awareness.

SUMMARY

ACCOUNTS ARE GIVEN of lecture-demonstrations on hypnosis before a general medical group, a medico-dental group, and a medical-psychological group at a university and a state hospital group with invited guests. In each instance, opportunity arose for a natural field experiment to be conducted.

In the first account, an "impossible subject" and a volunteer subject not believing in hypnosis for herself, and another volunteer interested in hypnosis for herself were used.

The technique employed for all three subjects was a Surprise Technique for

which an adequate preparation was made by an overelaboration, presumably for the audience but actually for the subjects themselves, based upon an extensive explanation of "My-Friend-John Technique."

In the second instance, the "impossible" subject was fitted into the demonstration as a waking subject showing the usual alert behavior and then transforming her cooperative behavior into hypnotic by a Surprise Technique, thereby discovering a hoped-for but despaired-of hypnotic ability.

The third instance was a totally unsuspected trance induction in a willing but hesitant subject who did not expect hypnosis. It occurred in response to a meaningful given—although, in the situation a meaningless suggestion, to which she had to supply the meaning from her own experience by the special wording of the problem posed for her.

The fourth instance was a natural field experiment in which a Surprise Technique based on minimal cues not recognizable by the audience or the nonspecified subjects resulted in two somnambulistic subjects who could account neither in the waking nor the trance state for their entering the hypnotic state nor could the audience. A repeated playing back of the tape-recorder allowed the discovery of the minimal cues, first by the subjects, and then by the audience despite acute attentiveness throughout the entire induction process.

In all instances, the author endeavors to indicate the probable psychological factors involved in eliciting the trance responses and to illustrate natural field experimentation.

In brief, in any experimentation in hypnosis, full attention should be given to psychological implications and minimal cues.

ADDENDA

¹ MUCH LATER, a transcription of this tape-recording was made. To the reader's eye, it was abominably repetitious, and the sequences of behavior relating to the two girls were easily detected.

This same transcription could be read aloud with adequate and deliberate impressiveness and could be made to sound most meaningful, but such simple reading rendered it actually uninformative. The minimal cues of the total situation and of the author's behavior, the chairs and the handkerchiefs were vital for any effective understandings.

Edited into good clear lucid grammatical English, no matter how impressively read, it was meaningless.

Later by several months an associate of the author read aloud as best he could—so far as possible without mimicking the author—the unedited transcription of the tape-recording separately to each of the original two girls. They were puzzled by his request but agreed willingly though wonderingly. Each declared that they had experienced but resisted a strong tendency to go into a trance. Later, he read that same tape as expressively as he could to both an unsophisticated and a group of trained subjects, without describing to them the original setting but endeavoring to duplicate the author's behavioral patterns in a prearranged room. The unsophisticated subjects were merely puzzled. They did have a feeling that they must have "missed something."

All of the half dozen trained subjects declared that it had produced in them "very definite hypnotic feelings, as if I wanted to go into a trance." Some stated "several times I felt like changing my seat. Also, the putting of the handkerchiefs on the floor beside the chairs next to you had the effect of making me listen most intently." The others gave less comprehensive but comparable statements.

The reading of the well-edited transcription was meaningless to a third group, but was recognized by the other two groups as a "cut down . . . meaningless version of what you read

before." Yet the actual reading setting itself was identical. The minimal cues arising out of the totality of the original setting and the original character of the entire communication had been destroyed by the editing.

²Perhaps a very simple and easily understood example can be given to clarify this type of accumulation of minimal cues leading to a specific response: The rest of the family was out for the evening, I was ill but comfortably seated in a chair. Bert, aged 17, had volunteered to remain at home to keep me company although there was no such need. A casual conversation was initiated by Bert in which he mentioned the rush and turmoil of getting everybody dressed and fed and everything packed up for a past vacation trip to northern Michigan. (We were living in Michigan at the time.) Next he mentioned the fishing, the catching of frogs and a frog-leg dinner, the beach dinner and the sand that the smaller children managed to sprinkle over every item of food, and then the albino frog at the abandoned quarry we had found.

Next he described in vivid detail the turmoil of getting everything out of the summer cabin, the oversights, the hunting for misplaced items, and the wandering off of the smaller children and the hurried search for them, the locking-up of the cabin, and the hungry tired state we were in when we arrived at Wayne County General Hospital near Detroit where we lived.

At this point, a vague notion passed through my mind to suggest to Bert that he might take the car and visit some friends, but this idea vanished as Bert laughingly told of how his brother Lance particularly liked eating Grandma Erickson's fried chicken on the way back to Michigan from Wisconsin. With much laughter, he recalled another occasion in which his small brother Allan had amused everybody, and especially Grandma and Grandpa Erickson with his "bulldozer" pattern of eating, that is, holding his plate up to his mouth and systematically using his other hand to shove the contents of the plate slowly and steadily into his mouth.

Again, this time a clearer idea came to mind of suggesting that Bert take the car keys and go for a ride so that I could enjoy reading, but I forgot it as I recalled my father's amused comment on the absolute efficiency and speed of Allan's method of eating.

While we were laughing about this, Bert mentioned the trip to my brother's farm, and six-year-old Betty Alice's long solemn explanation to three-year-old Allan's worried inquiry about how the mama chickens nursed their babies, that chickens were not mammals and only mammals nursed their young. While we were laughing about this, a third time the thought came to mind of offering the car for the evening, this time most clearly, and I recognized why. In every item of reminiscences, Bert was speaking of pleasant and happy memories based each upon the driving of a car. Yet not once had he actually said the word "car," the nearest he came to that was to say "packing up," "trip," "went to see," "way out to the old quarry," "down to the beach," "on the way back to Michigan from Wisconsin," and the trip to my brother's farm, and not once did he mention the word key—locking-up the cabin was as close as he came to that.

I recognized the situation at once and remarked, "The answer is 'No'." He laughed and said, "Well, Dad, you'll have to admit it was a good try." "Not good enough, I caught on too fast. You overemphasized trips in the car. You should have mentioned the picketing of Ned's place, where our car was serviced, Ed Carpenter from whom I bought the car, the ice-fishing trip which was in Emil's car but did involve an automobile. In brief, you restricted yourself to a constant indirect mention of pleasure trips, always in relationship to us, it was always in our car. The inference to be drawn became too obvious. Do you really want the car?" His answer was, "No, I just thought I'd get a little fun out of getting you to offer me the car keys."

Initial Experiments Investigating the Nature of Hypnosis*

DURING THE 1923-24 FORMAL SEMINAR on Hypnosis at the University of Wisconsin under the supervision of Clark L. Hull, the author, then an undergraduate student, reported for the discussion by the postgraduate students of the Psychology Department upon his own many and varied experimental investigative findings during the previous six months of intensive work and on his current studies. There was much debate, argument and discussion about the nature of hypnosis, the psychological state it constituted, the respective roles of the operator and the subject, the values and significances of the processes employed in induction, the nature of the subject's responses in developing a trance, the possibility of transcendence of normal capabilities, the nature of regression, the evocation of previously learned patterns of response whether remote or recent, the processes involved in individual hypnotic phenomena and in the maintenance of the trance state, and, above all, the identification of the primary figure in the development of the trance state, whether the operator or the subject. The weekly seminars were scheduled for 2 hours each, but usually lasted much longer, and frequently extra meetings were conducted informally in evenings and on weekends and holidays, with most of the group in attendance.

No consensus concerning the problems could be reached, opinions and individual interpretations varied widely, and this finally led the author to undertake in October 1923 a special investigative project. This special study has remained unpublished although it was recorded in full at the time, as were many other studies. One of the reasons for the decision not to publish at that time was the author's dubiousness concerning Hull's strong conviction that the operator, through what he said and did to the subject, was much more important than any inner behavioral processes of the subject. This was a view Hull carried over into his work at Yale, one instance of which was his endeavor to establish a "standardized technique" for induction. By this term he meant the use of the same words, the same length of time, the same tone of voice, etc., which finally eventuated in an attempt to elicit comparable trance states by playing "induction phonograph records" without regard for individual differences in subjects, and for their varying degrees of interest, of different motivations, and of variations in the capacity to learn. Hull seemed thus to disregard the subject as a person, putting him on a par with inanimate laboratory apparatus despite his awareness of such differences among subjects that could be demonstrated by tachistoscopic experiments. Even so, Hull did demonstrate that rigid laboratory procedures could be applied in the study of some hypnotic phenomena.

Recently published papers concerning the realities of hypnosis have led to a re-reading and analysis of the author's notebooks in which were recorded in full numerous unpublished studies. (Credit for this practice should be given to Dr. Hull and the author often wonders what happened to the bookshelves of notebooks which Dr. Hull himself maintained, full of his own unpublished studies.) The re-

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reading of this material located the data upon which this paper is based, permitting this report on experimental investigations into some of the apparent misunderstandings of hypnosis which are still variously accepted without careful critical thinking.

EXPERIMENTAL PLAN

As originally planned and executed, this early experiment to secure some of the answers to the intriguing questions confronting the seminar group was so organized that it did not involve the use of hypnosis. Rather, it was based upon a consideration of the concepts of introspection developed by E. B. Titchener, Wilhelm Wundt, W. B. Pillsbury and others and was organized as a direct inquiry into these concepts as a possible initial approach to a later identification of hypnosis or of some of its phenomena. A central consideration in the proposed experimental project was suggested by the well-known Biblical saying, "As a man thinketh in his heart, so is he," a point made in the seminar discussions by several of the discussants. Professor Joseph Jastrow, who was then head of the Psychology Department, aided and advised the author in his plan of experimentation. Jastrow himself was only slightly interested in hypnosis, but he was interested in the author as a student. Hull was not consulted nor did he know of the experiment until it was completed.

SUBJECT SELECTION

The securing of subjects was relatively easy, since any college population offers a wealth of volunteers. Two elements of selectivity were employed. All students taking psychology were excluded. All students who were acquainted with the author were excluded for the reason that they might know that he was interested in hypnosis. Both male and female undergraduates were employed, most of them, by mere chance being sophomores. Among them there was a predominance of agricultural, home economics, engineering, commerce, and liberal art students, with an approximately even distribution of sex and of comparable ages.

To these students individually, using prepared typewritten material, a plausible, somewhat interesting, but definitely superficial explanation was given of the concept of "introspection." A comparably carefully worded invitation was extended to each of them to participate in an experiment; this embraced the idea that the experimenter proposed to do research consisting of "discovering the processes of thought in thinking through from beginning to end any specified task." As an illustrative example, it was pointed out that people know the alphabet and can recite it fluently. However, the majority of those same people cannot recite the alphabet backwards correctly from Z to A except by a slow "back and forth process of thinking." To those who promptly demonstrated that they could recite the alphabet backwards easily, a second example was offered, namely, the extreme difficulty that would be encountered in reciting backwards the entire nursery rhyme of "Mary had a little lamb—."

It was then explained that a much simpler task was in mind for them to do, and they were earnestly asked not to do any reading of Titchener's "work on thought processes" (Titchener's name was repeatedly mentioned to discover any previous awareness of his work, to emphasize "thought processes," and to distract their attention from the word "introspection").

They were individually apprised of the possibility that the task might take from

½ to 2 hours, and a clock in full view, running silently, was indicated, located directly in front of them on a shelf on the laboratory wall. The experimenter, it was explained, would sit quietly behind a screen some 12 feet to the rear and would not be visible, and he could be spoken to or questioned if the desire or need arose, but it was preferred that the task once begun be done in complete silence, so that there would be no distractions or interferences.

What the subjects did not know or observe was that a mirror was so arranged carelessly among odds and ends in a jumble of laboratory apparatus so that the author had a full view of the subject's face by means of an obscure peephole concealed by the patterned design on the screen.

From a typewritten copy, each subject was separately given the following instructions:

"You are to seat yourself in this chair comfortably, just looking straight ahead. With your eyes open you are to imagine that there is a small table standing beside the right (left in the case of those lefthanded) arm of the chair. Your arms are to be resting comfortably in your lap. On that imaginary small table, you will imagine that there is a large fruit bowl filled with apples, pears, bananas, plums, oranges, or any other kind of fruit you like but do not turn your head to look in that direction. All of this imaginary fruit you can imagine as being in easy reach of your hand resting in your lap.

"Next you are to imagine a table of normal height on the bare floor just in front of you, just far enough away so that you would have to lean a little forward to place anything on it.

"Now the task to be done is for you to sit in the chair looking straight ahead and *mentally go through the processes step by step and in correct order* of thinking at a mental level only of the task of lifting your hand up from your lap, of reaching up over the arm of the chair, of feeling elbow and shoulder movements, the lateral extension of your arm, the slight lowering of your hand, the touching of the fruit, the feel of the fruit, the selection of any one piece, of closing your fingers on it, lifting it, sensing its weight, moving your hand with the fruit up, back over the arm of the chair and then placing it on that imaginary table in front of you. That is all you have to do, just imagine the whole thing. If your eyes get tired or if you can think your thought processes out more clearly with them shut, just close them. You should expect to make errors in getting each step in the right order, and you will have to pause and think back just as you would in trying to think the alphabet (or the nursery rhyme) backward, and it is only reasonable that you will make mistakes and have to go back and start over again. Just take your time, and do it carefully, silently, really noting each of your thought processes. If you wish I will reread these instructions, and you may realize that perhaps you might have such a thought as first picking up an apple and then changing your mind and deciding to pick up an orange. (All wanted a second reading, some a third.)

"Now that the instructions are clear, let's look at the bulletin board on the wall over there and when the minute hand of the clock is directly on one of the numerals of the clock-face, we will both take our positions and the experiment will begin."

THE EXPERIMENTAL RESULTS

There were three general types of results obtained from a total of 63 subjects.

These may be classified for the purpose of discussion into three general categories: None; Fright Reactions; and Full Participation.

Concerning the first category which included 18 subjects, they became restless, demanded further repetitions of instructions, and finally declared their total disinterest in the entire project, declaring that they could not do it, that it did not seem to make any sense, or simply that they were no longer interested in participating. Engineering and agriculture students predominated in this group. The author's tentative conclusion was that such students preferred concrete realities to abstract imagining.

The second category, including 13 students, was much more interesting. They became frightened, even to a state of panic, and interrupted the experiment demanding reassurance, and they finally refused to continue. (Unfortunately no personality studies had been done on them nor did the author then have enough clinical experience to appraise them as personalities.)

Their reactions were described variously by them, but usually concerned uncontrollable and involuntary upward movements of the dominant hand; peculiar numb sensations of the legs, a feeling of rigidity of the body, and a blurring or closing of the eyes that they felt they could not control. To all of this, they reacted with a frightened feeling which alarmed them, this alarm then allowing a freedom of action which led to an emphatic demand to be excused. The experimenter accompanied his dismissal of them by elaborately expressed gratitude for the clarity of their demonstrations of "one of the aspects of intense mental concentration." This proved to be a most reassuring maneuver, so much so that 3 subjects then volunteered to repeat the experiment. The offers were not accepted, assurance being given that the experimenter was already satisfied by their contribution.

The third group, numbering 32, manifested to varying degrees some remarkably similar forms of behavior. These may be listed as (1) slow loss of the blink reflex, (2) altered respiratory rhythm, (3) loss of swallowing reflex, (4) development of ideomotor activity in the dominant hand, (5) exceedingly slow movement of the hand and arm up and over the arm of the chair, (6) slow closing of the eyes, usually at some point preceding or during the ideomotor movement of the hand and arm, (7) groping movements of the fingers as if selecting an object at the site of the imaginary fruit bowl, (8) a lifting movement involved in picking up an object, and a slow leaning forward, seemingly placing the object upon the imaginary table, and (9) then leaning back in the chair and *continuing to rest quietly*.

The experimenter was at a loss as to how to proceed the first time that this succession of events occurred, which was with the third subject. The first two subjects had rejected the task. Intense study of the quietly resting subject's face indicated that a deep trance had been induced. Yet there had been no mention of hypnosis; the author's then naiveté and inexperience with human behavior in a rigid circumscribed experimental situation did not permit him to grasp the significances of the situation immediately. The entire purpose had been to study behavior in two *presumably* different circumscribed situations; in one of these, designated as a hypnotic situation, the author felt that it was distinctly possible that the operator was the dominant and effective active figure; and the second presumably different form of behavior was characterized by the non-participation of the operator with the subject as the active person.

The subject passively waited, while the experimenter considered that, because

the original joint participatory activity concerned in the giving and receiving of instructions, the looking at the bulletin board while awaiting the minute hand of the clock to reach a numeral, and the separate but joint taking of respective positions, there had been a foundation for genuine hypnotic rapport. Acting upon this tentative assumption, and still remaining behind the screen he remarked, "I think you have certainly worked on this concentrating long enough now, so it will be all right if you leave, because I have to stay and write this up."

Slowly the subject awakened in the manner characteristic of the hypnotic arousal pattern of behavior, commented, as he looked at the clock, that the time had seemingly passed remarkably rapidly and he then departed.

The previous two subjects who had failed were engineering students, this one was an English major. It was reasoned again that the engineers were more interested in concrete realities, and that the student of literature was interested in abstractions of thought.

Despite this early significant experimental occurrence with the third subject, and thence the expectation of similar possibilities in the experimenter's mind thereafter, a total of 31 subjects failed in random order, 3 of them being among the final 5, and the very last subject was a failure in a fashion similar to the first 2 subjects.

The 32 subjects who manifested hypnotic-like behavior showed various degrees of what could be regarded as trance states, and some spontaneously made comments aloud about their behavior. Thus one subject made the accurate observation,

"I not only talk with my hands, I think with them." Another, a music student, remarked similarly, "Every time a little old melody runs through my head, I just can't help beating time to it with my foot, and now with thoughts running through my head, I'm moving my arm." Both appeared to be commenting only to themselves.

Even more noteworthy was the behavior of some other subjects. One such subject, judging from his finger movements "picked up" an apple or an orange which he "placed on the table" and then he deliberately "reached" again into the "fruit bowl," apparently selected and ate two hallucinatory bananas, going through the motions with both hands of peeling them, and then dropping the "peelings" into an apparently hallucinate wastebasket on the other side of the chair. Another subject, after apparently "placing" a banana on the "table," asked the author if she might have an orange to eat. Consent was given and she leaned over, and, with open eyes, selected an orange as if visually, went through the motions of picking it up, peeling it, and apparently putting the peelings on the arm of the chair, and eating it, and then, seemingly being at a loss how to dispose of the peelings, finally leaned forward and placed them on the imaginary table slightly to one side of where she had previously placed the banana. When she had finished this hallucinatory activity, she opened her handbag and dried her mouth and hands with her handkerchief.

Another subject asked if he might take an apple home with him, specifying "that big red one there," explaining that he wanted to take it to his room to eat while he studied. Consent was given and he went through the motions of picking it up and putting it in his jacket pocket.

The same procedure was followed in arousing these apparently hypnotized subjects as had been employed with the third subject. This unprovided-for variation in the planned procedure had of necessity been improvised by the experimenter

with the third subject, and since the first two subjects were uncooperative and had been dismissed, its introduction was not considered to be an undue variation in procedure.

The same words of reassurance were used for each of the group manifesting "Fright Reactions" thus making that enforced alteration of experimental procedure a constant factor in the experiment.

A variation of procedure involved a half dozen subjects who apparently did not completely arouse the trance state immediately upon instruction. This situation was met by walking with these subjects out of the laboratory and outside the building through a nearby side-door, making the comment "Well, before I write up my report, I'll have a breath of fresh air." This proved to be a sufficient procedure to arouse the subjects completely.

Some subjects who revealed only a partial or no amnesia for what they had done were surprisingly noted to continue to hallucinate after awakening as actual objects the fruit bowl and its contents and the large and small tables and some even commented, with curiosity, remarking that they had not seen those objects when they first entered the room. These comments were always evaded by the expedient of pleading pressure of work in writing up immediately the account of the experiment.

But there were 12 subjects who demonstrated a total amnesia from the moment of sitting down in the chair as they looked at the clock until the close of the session. Several, upon arousing, were startled by the length of time that had passed, as noted by again regarding the clock. The passage of time was obviously a surprise to them, and this confused several who declared, "but I'm just ready to begin." Others looked bewildered, glanced at the clock, and asked what had happened. None of this group continued to hallucinate either the large or small tables or the bowl of fruit but one subject remarked that his mouth felt and tasted as if he had eaten a banana.

In no instance was any explanation given to or by the subjects except to say that they had "really concentrated."

CONTINUATION OF EXPERIMENTAL STUDY

Some 3 months later the 31 subjects who did not complete the experiment, that is, the 18 who had not been willing or able to begin, and the 13 who had been frightened away, were again approached individually with a new request.

This request was that they participate in a new experiment, namely, that of being hypnotized. All but one agreed, this one being in the first category of complete nonparticipation, and several agreed but seemingly reluctantly. (These included some of those who had been frightened.)

In a different room but comparable to the first, each subject was met individually and it was explained that he was to seat himself comfortably with his hands in his lap in a chair before a writing table on which was a pad of paper and a pencil. He was to look continuously at the pencil until his hand picked it up and started to write involuntarily. He was to concentrate secondarily on the lifting of the hand, and primarily on seeing the pencil begin to write, and to do nothing more.

Again the experimenter retired behind the screen and watched through the peephole in the previously prepared screen at the full-face mirror view of the

subject which was afforded by several mirrors spaced so as to give full views from different angles. These mirrors were all obscurely and inconspicuously placed in stacks of laboratory apparatus.

Of the 30 subjects, 10 again gave up. These were again all agricultural and engineering students, and none was from the frightened group. The remaining 20 all developed trance states of varying depths. Of the 18 who had originally walked out during the first experiment without more than a semblance of cooperation, 7 remained. Of these, 3 developed a somnambulistic trance, 3 a medium trance, and 1 a light trance. The criteria at that time employed to classify these subjects as somnambulistic were simply the presence of open eyes, automatic writing and a total subsequent amnesia. The criteria for a medium trance were a partial or a selective, but not total, amnesia. Thus, there might be a memory of seeing the pencil write, or a memory of reading what had been written, but it was regarded as the hand, not the subject, who picked up the pencil and wrote. Light trances were so classified when adequate ideomotor activity occurred but when there was full recollection of the events, and an expressed description "I could feel and see it happening to me, but I couldn't help it. It didn't seem to be me doing the movements."

All of the previously frightened group, 13 in number, developed trance states, 4 of which were somnambulistic, 7 medium and 2 light. Of significance was the fact that the 7 medium and the 2 light trance subjects spontaneously volunteered the information that going into hypnosis was "exactly like introspection and concentration." They described in detail the terrifying sensations they had felt originally, and the reexperiencing of the same feelings again, but with the comforting knowledge that they had been told that they were to be hypnotized, an idea that had evidently reassured them and effectively abolished their fears. They expected to feel different when hypnotized, and this understanding was reassuring. It served to allow them to accept the experience, not to effect it.

The somnambulistic subjects were subsequently questioned directly in the trance state for their feelings as they had developed the hypnotic state. They all reported having the same subjective feelings that they had experienced in the "introspection and concentration experiment," and volunteered the information that they now knew that they had then developed a trance state, 4 somnambulistic subjects, who had also previously reacted with alarm, explained that the "unexpectedness of strange feelings" had frightened them. Knowing now that hypnosis was being employed, they had available an understanding of their subjective experiences and, hence, there had been no alarm.

The original experiment of "introspection" was again repeated with all of the previously successful subjects, with the result that all except 7 developed somnambulistic trances and those 7 all developed medium trances. The subjects previously manifesting light trances now developed medium or somnambulistic trances.

The experiment with pencil and paper was then repeated with the subjects who had been successful in the "introspection experiments," this time as an experiment in hypnosis. Hypnotic trances were induced in all very quickly, and practically all were somnambulistic.

All of these subjects were used by Clark L. Hull's graduate students and also by the author during the second semester's continuation of the Seminar, particularly in the conducting of various studies for publication in Hull's book and

elsewhere, in replicating the author's reports during the first semester, and in the demonstration of the elicitation of other hypnotic phenomena.

ADDITIONAL EXPERIMENTATION

When the above described experiments were almost completed, a particular event occurred during a seminar meeting. Some of the graduate students had been pursuing the hypothesis that "suggestions" constituted no more than a *point of departure for responsive behavior*, but that the manner and fashion in which these hypnotic suggestions and commands served as *points of departure* for complex hypnotic phenomena which were not encompassed by either the apparent or implied meaningfulness of the words employed seemed to be inexplicable problems. Out of the unsatisfying and divergent views and the more or less relevant discussions, the author seized upon, for an immediate experiment, the narration of her anger pattern by Miss O, whom he knew fairly well as a group member but not as a person, although he knew considerable about her family history.

Miss O's long-established anger pattern was of temper-tantrum character. Whenever angered or frustrated by her father or mother she, an only child, would turn away suddenly, rush upstairs to her bedroom, slam the door shut, throw herself on her bed and burst into angry sobbing. She consented to accept the following "suggestion." "Go down the flight of stairs just beyond this seminar room, step outside the building through the side door at the foot of the stairway, look over the campus briefly, come back inside the building, look about briefly, then rush upstairs with increasing speed and rush in here slamming the door behind you and fling yourself into your seat at the conference table."

With obvious embarrassment she consented, and a few minutes later, while the group waited expectantly, Miss O could be heard running up the stairway. She rushed into the room, flushed of face, slammed the door behind her, threw herself into her chair, resting her face on her arms on the table and burst into uncontrollable sobbing to the bewilderment and amazement of the group including the experimenter.

After some minutes of sobbing, Miss O straightened up and furiously berated the experimenter for his "outrageous suggestion," and then turned her wrath on the entire group for their "shameful conduct." Then, with equal suddenness, her anger left her, and in a bewildered and startled fashion she asked, "why did I get so angry?"

There followed much excited discussion and questioning until someone asked Miss O at what point her anger had developed. To this she could reply only that she had no idea and she then readily and interestedly agreed to repeat the experiment with the addition that this time she was "to note exactly where you are when you develop anger."

As she left the room she remarked with calm interest that it seemed to her that she had become angry on the way upstairs but that she was not certain.

There followed an exact repetition of her previous behavior but with the exception that when she again began to berate the experimenter and the group she suddenly recognized the reality situation, stopped, laughed through her tears and said. "Why, I did the same thing again." She then explained, "I was thinking that I had been about halfway upstairs before, but then I suddenly got so angry I couldn't think until just now. But please don't talk to me because I still feel angry and I

can't help it." Her facial expression and tone of voice confirmed her statement.

Shortly, however, evidently recovering her composure, she joined in the discussion of her behavior with interest and without embarrassment.

Later in the discussion she was asked again by the experimenter if she were willing to repeat the experiment. She hesitated a moment, and then agreed. As she walked toward the seminar room door, she commented that it would not be necessary to go through the entire procedure, but that she could just mentally review the whole task, step by step. As she completed this comment she opened the door to leave the room, but immediately slammed it shut and whirled on the experimenter screaming, "You—you—you!" She then burst into tears and collapsed in her chair sobbing. Shortly she again composed herself, and asked to be excused from further participation in such experimentation.

A few seminars later, when the experimenter had completed his study as described above, Miss O was asked again about her previous demonstrations. She manifested embarrassment, but reluctantly expressed a willingness to discuss them.

At once the author explained, "I don't want you to go downstairs or to get angry. All you need to do is sit right there, rest your head on your arms on the table and quietly, and very comfortably, remember every step you made going downstairs, opening the side door, looking over the campus, coming back inside, and looking up and down the hallway as you did before you started for the stairway. *Then when you have got that far in your thinking sit up straight and look at me.*"

Miss O readily acceded to the request, and shortly straightened up and looked at the author who was sitting directly opposite her at the conference table. As she did so, it was apparent to everyone that she was in a deep somnambulistic trance, and she was found to be in rapport only with the experimenter, being completely out of touch with her actual surroundings. She did not respond in any way to the group members, was passively responsive to the experimenter, and catalepsy, ideo-sensory phenomena, dissociation, apparent regression, and anesthesia could be demonstrated. When she was asked to develop hand levitation, she apparently failed. Previous experience with other subjects led the experimenter to suggest hand levitation with the other hand. Apparently again she failed.

The experimenter then carefully stated, "I want to start hand levitation with you again, *doing so from the very beginning*. When you are ready, nod your head to let me know." Shortly she nodded her head, whereupon the experimenter slowly and systematically suggested right hand levitation to be continued to a level higher than her head. As the author gave his suggestions, the group watched her hand. There was no upward movement. The experimenter, watching her head and neck for muscle tension, finally remarked, "That's fine. Now place slowly and gently and deliberately your left hand on the back of your right hand." Slowly, she lifted her left hand upward above her head, slowly moving it across the midline, then lowering it slightly and letting it come to rest, while the rest of the group stared in silent wonderment. At the cessation of the movement of her left hand she was asked if it were on top of her right hand. She slowly nodded her head affirmatively. This was only the third time the experimenter had encountered hallucinatory hand levitation, and first instance had bewildered him immensely. Comparable hallucinatory hypnotic behavior of other forms has since been encountered occasionally in the author's subjects and those of others. Unfortunately, lack of critical observation or inexperience sometimes leads to the inference that the subject is unre-

sponsive rather than the realization that he is most responsive in a more complex fashion than was intended and that the requested hypnotic behavior is being subjectively experienced at an hallucinatory level.

In this instance, in demonstrating hypnotic phenomena with Miss O, hand levitation had been left as the final demonstration for one certain reason. Miss O, in the previous experiment dealing with her anger reaction had been asked to run *up* the stairway. Hence, the experimenter was being very cautious about a renewed use of the word *up* or a word of similar meaning because of the possible association with the previous use of the word. He had expected only likelihood of anger development, but with the failure of beginning levitation he had visually checked her neck muscles for evidence of tension which had been noted in the two previous subjects who had hallucinated hand levitation.

Indicating silence to the group, he asked Miss O to rest her hands comfortably in her lap and indicate if she were willing to answer a few general questions about the time she manifested anger for the experimenter. She nodded her head affirmatively.

She was then asked, "Are you now just like you were then, or perhaps I should say Are your present mental state and your mental state at that time, the same or identical?" Her face developed a thoughtful expression, and then slowly she nodded her head affirmatively. She was asked, "Will it be all right for me to ask you now to feel those feelings that you then developed?" Her reply was a verbal, "Please don't." "Why not?" "I don't want to get angry." She was asked if she wanted to do anything more. After a few moments, she replied, "No." Accordingly, she was asked to put her arms on the conference table, to rest her head upon them and then "straighten up, just like you were when I first asked you to do this same thing." This she did becoming fully awake with seemingly a total amnesia for the entire trance experience.

One of the group asked her if she could be hypnotized, to which she answered that she never had been but thought she would like to be, and she expressed an immediate willingness to act as a subject.

She was asked by the author to place her hands palm down on her thighs and *to watch her right hand*. Essentially similar hand levitation suggestions were given as before, but this time, because of the instruction to *watch* her right hand which actually remained immobile on her lap, her visual hallucinating of the slow continuous rise of her right hand was apparent, until the direction of her gaze indicated that the hand was above her head level. Several of the group tried to question her, but she proved to be in a rapport only with the experimenter.

She was asked by him if she had ever been in a trance before, the intended meaning being only during that day. Her answer was a simple "Yes." "How many times?" Instead of the expected answer of "Once" she replied "Four times."

"When?". "Today, that other day." "What other day?" "When I got angry."

She was awakened and an apparently total amnesia was demonstrated by the expedient of asking her again if she had ever been hypnotized, which elicited the previous negative reply and offer to volunteer.

Instead of overtly accepting her offer, a member of the group asked her if she thought she could do hand levitation. She replied, "I don't know but I'd like to try," immediately settling herself in position, and duplicating without any further remarks or suggestions her previous hallucinatory ideomotor behavior and trance

development. The member of the group who had put the question proved to be the only person in rapport with her.

She was asked to waken from the trance state. Again she manifested amnesia. The next few hours of the seminar were spent discussing her behavior to which was added a discussion of the author's private experimentation. The entire sequence of events was disturbing and obviously displeasing to Dr. Hull, since he felt that the importance of suggestions and suggestibility and the role of the operator in trance induction were being ignored and by-passed, with the result that this approach to a study of hypnosis was then abandoned in the University of Wisconsin seminars.

FURTHER CONSIDERATIONS

Since then, particularly after the author had received his doctoral degree and was finally officially permitted to resume experimental work at the Worcester State Hospital in Worcester, Massachusetts, much use was made of these learnings in developing the author's various techniques of indirect and permissive hypnotic induction.

In addition and by way of contrasting their respective values, the author has done much experimentation on direct and authoritative techniques, and on traditional, ritualistic, repetitive verbal techniques.

In general his findings, based upon experience with many thousands of subjects have been that the simpler and more permissive and unobtrusive is the technique, the more effective it has proved to be, both experimentally and therapeutically, in the achievement of significant results. Also, his experience has been that the less the operator does and *the more he confidently and expectantly allows the subject to do*, the easier and more effectively will the hypnotic state and hypnotic phenomena be elicited in accord with the subject's own capabilities and uncolored by efforts to please the operator. However, it must be borne in mind that subjects differ as personalities, and that hypnotic techniques must be tailored to fit the individual needs and the needs of the specific situation. Therefore the user of hypnosis should be fully cognizant with all types of hypnotic techniques and fully appreciative of his subject as a personality. He should bear ever in mind that the role of the operator is no more than that of a source of intelligent guidance while the hypnotic subject proceeds with the work that demonstrates hypnotic phenomena, insofar as is permitted by the subject's own endowment of capacities to behave in various ways. Thus, the color-blind person can not be given visual receptors to receive color stimuli, but the person with normal color vision may be enabled to block the utilization of visual receptors of a specific type, just as happens in the common experience in ordinary everyday life when a book with a certain clearly visible title cannot be found in the book case because it is blue-covered and the search has been made in a mistaken belief that it is red-covered, thereby utilizing a different frame of reference and thus defeating the effort to find the book.

It should also be kept in mind that moods, attitudes, and understandings often change in the subject even as he is undergoing a trance induction, and that there should be a fluidity of change in technique by the operator from one type of approach to another as indicated.

Unfortunately much experimentation is done in only rigid terms of the operator's limited understandings and abilities. Perhaps this may best be exemplified by such typical experiments as naively demonstrating such "anti-social behavior in hypnosis" as persuading a subject to open a new lipstick or to appropriate a dollar bill in a

strict laboratory setting, in ignorance of the later demonstrated fact that the laboratory setting and the experimental situation alone, with no utilization of hypnosis whatsoever, may be so demanding as to elicit behavior contrary to the subject's wishes, background, training, better judgment, and even moral sense¹. Further, such ignoring of the subjects' understandings in preference to the experimenter's belief that he is controlling conditions, may lead to "experiments" in which the equivocating of waking and trance responses may actually be a product of the development of an identity of the subjects' supposedly different conscious states rather than the evocation of similar responses in genuinely different states.

OTHER CONSIDERATIONS

This experimental work was done long before any studies were being done on so-called "simulation of hypnosis" in which subjects are asked by the experimenter to "simulate" hypnotic behavior. Many such reports have been made by various authors, who seem to be unaware that the best simulation is an actualization. Additionally in these so-called "controlled experimental studies," the simulating subjects often have had hypnotic experience, have witnessed hypnosis, and certainly have some preconception of hypnosis. Hence, experimentation with such subjects leads to a doubt of the experimenter's scientific sophistication or integrity.

The above experiments were not done to determine if there could be a simulation of hypnosis and the achievement of comparable behavior. Rather, the experiment was designed for the purpose of determining the role importance of operator and subject. However, quite unintentionally, it was discovered that if a nonhypnotic subject is innocently (the author admits his naiveté at that period in his scientific career) asked to perform, at a waking level, the same sort of behavior that can be used to induce a hypnotic trance although no mention of hypnosis is made, a hypnotic state can unmistakeably result. There is no need to ask for simulation, since the task itself can lead to hypnosis. Hence, one can only wonder at the scientific acumen of those who endeavor to demonstrate that requested "simulated hypnotic behavior" is otherwise than actual hypnotic behavior.

Additionally, the findings of this early experimentation have been confirmed throughout the years in the experience of this author and numerous of his colleagues. The operator or experimenter is unimportant in determining hypnotic results regardless of his understandings and intentions. It is what the subject understands and what the subject does, not the operator's wishes, that determine what shall be the hypnotic phenomena manifested. Hence, hypnotic experimentation which is evaluated in terms of the experimenter's plans, wishes, intentions and understandings is invalid unless communicated to the subject's understanding and so accepted. Evaluation should be purely in terms of the subject's performance, and it is his behavior, not the experimenter's words, that should be the deciding factor in appraising experimental work. Many a clinician has had the experience of weighing the advisability of hypnosis for a patient who requests it, only to find that the matter is entirely out of his hands because of a spontaneous trance. Not only this, the clinician may carefully suggest relaxation and have the patient respond with catalepsy and anesthesia. Or he may suggest anesthesia and discover that, the patient is manifesting dissociation or even regression. At best the operator can only offer intelligent guidance and then intelligently accept the subject's behavior.

¹Milgram, S.: Behavioral study of obedience. *J. abnorm. soc. Psychol.*, 1963, 4, 371-378.

The Confusion Technique in Hypnosis*

THE REQUEST HAS BEEN MADE many times that I record in the literature an account of the Confusion Technique that I have developed and used over the years, including a description, a definition, illustrative examples, and various observations, uses and findings made with it.

It is primarily a verbal technique although pantomime can be used for confusional purposes as I shall describe in another article. As a verbal technique, the Confusion Technique is based upon plays on words, an involved example of which can be readily understood by the reader but not by the listener, such as "Write right right, not wright or write." Spoken to an attentive listener with complete earnestness, a burden of constructing a meaning is placed upon him and before he can reject it, another statement can be made to hold his attention. This play on words can be illustrated in another fashion by the statement that a man lost his left hand in an accident and thus his *right* (hand) is his *left*. Thus, two words with opposite meanings are used correctly to describe a single object, in this instance the remaining hand. Then, too, use is made of tenses to keep the subject in a state of constant endeavor to sort out the intended meaning. For example, one may declare so easily that the *present* and the *past* can be so readily summarized by the simple statement, "That which now *is* will soon be *was* even as the *was* was once the *is*." To illustrate this example, "Today *is* today but it *was* yesterday's *future* even as it *will be* tomorrow's *was*." Thus are the past, the present and the future all used in reference to the reality of "today."

The next item in the Confusion Technique is the employment of irrelevancies and non sequiturs, *each of which taken out of context* appears to be a sound and sensible communication. Taken *in context*, they are confusing, distracting and inhibiting and lead progressively to the subjects' earnest desire for and an actual need to receive some communication which, in their increasing state of frustration, they can readily comprehend and to which they can easily make a response. It is in many ways an adaptation of common everyday behavior, particularly seen in the field of humor, a form of humor this author has enjoyed since childhood.

A primary consideration in the use of a Confusion Technique is the consistent maintenance of a general casual but definitely interested attitude and speaking in a gravely earnest intent manner expressive of certain, utterly complete, expectation of their understanding of what is being said or done together with an extremely careful shifting of the tenses employed. Also of great importance is a ready flow of language, rapid for the fast thinker, slower for the slower-minded but always being careful to give a little time for a response but never quite sufficient. Thus the subject is led almost to begin a response, is frustrated in this by then being presented with the next idea, and the whole process is repeated with a continued development of a state of inhibition, leading to confusion and a growing need to receive a clear-cut comprehensible communication to which he *can make* a ready and full response.

*Amer. J. Clin. Hypn. 1964, 6, 183-207.

The incident, one of spontaneous humor on my part, that led to its adaptation as a possible hypnotic technique was as follows. One windy day as I was on my way to attend the first formal seminar on hypnosis conducted in the U.S. by Clark L. Hull at the University of Wisconsin in 1923, where I reported on my experimental work and graduate psychology students discussed my findings, a man came rushing around the corner of a building and bumped hard against me as I stood bracing myself against the wind. Before he could recover his poise to speak to me, I glanced elaborately at my watch and courteously, as if he had inquired the time of day, I stated, "It's exactly 10 minutes of two," though it was actually closer to 4:00 p.m. and I walked on. About a half a block away, I turned and saw him still looking at me, undoubtedly still puzzled and bewildered by my remark.

I continued on my way to the laboratory and began to puzzle over the total situation and to recall various other times I had made similar remarks to my classmates, laboratory mates, friends and acquaintances and the resulting confusion, bewilderment and feeling of mental eagerness on their part for some comprehensible understanding. Particularly did I recall the occasion on which my physics laboratory mate who had told his friends that he intended to do the second (and interesting) part of a coming experiment and that he was going to make me do the first (and onerous) part of that experiment. I learned of this and when we collected our experimental material and apparatus and were dividing it up into two separate piles, I told him at the crucial moment quietly but with great intensity, "*That sparrow really flew to the right, then suddenly flew left, and then up and I just don't know what happened after that.*" While he stared blankly at me, I took the equipment for the second part of the experiment and set busily to work and he, still bewildered, merely followed my example by setting to work with the equipment for the first part of the experiment. Not until the experiment was nearly completed did he break the customary silence that characterized our working together. He asked, "How come I'm doing this part? I wanted to do that part." To this I replied simply, "It just seemed to work out naturally this way."

As I reviewed and studied these occurrences and numerous others of a comparable character, they all appeared to have in common a certain number of psychological elements.

1. There was an interpersonal relationship of a sort that required some kind of joint participation and experience.
2. There was the sudden and inexplicable introduction of an irrelevant idea, comprehensible in its own context, but which was completely unrelated and irrelevant to the immediate situation.
3. Thus the person was confronted by (1) a comprehensible situation for which a pattern of response would be easily forthcoming, and (2) an utterly irrelevant—but comprehensible in itself alone—non sequitur, thereby leaving the person without any means of response until sufficient time had passed to permit adequate mental reorganization to dismiss the non sequitur from the pertinent situation. Thus, in the first instance, the inadvertent collision called for conventionalized social responses between two people; but instead, a non sequitur, uncalled for and presented as an earnest factual communication despite the contradiction of it by reality, left the man inhibited in making any expectable conventional response and the non sequitur, in itself comprehensible, called for no response since it had not been asked for, thereby leaving the man in a state of bewilderment until he could reorganize his mental activity to exclude the non sequitur and go about his business.

In the second example, George and I completed the task of dividing the material and apparatus, and at the moment when he knew what he was going to do but did not know what I was really going to do, I impressively presented him with an irrelevant communication comprehensible in itself but offering no opportunity for a response on his part. Then, as a mere matter of course, I took that part of the material and apparatus chosen by me and he, inhibited by the unanswerable irrelevancy, automatically and passively followed my example by taking the remaining material and we simply set to work in our customary silent manner. By the time he had dismissed the irrelevancy from his mind, it was much too late for him to say "You do that and I will do this."

4. Thus, there is a structuring of a situation so that definite and appropriate responses are called for but, before they can be made, an irrelevancy or non sequitur, which in itself alone is a meaningful communication, is introduced into the situation thereby inhibiting the other person from making his natural response to the original situation. This results in a state of bewilderment and confusion and progressively leads to a profound need to do something, just anything, uncritically and indiscriminately. In the first instance, the man merely stared helplessly after me; in the second instance, George passively followed my example and automatically and indiscriminately did the task he did not want to do, but a task which was *proper and fitting in the total laboratory setting*, although previously rejected by him apparently without my knowledge.

In actuality, there was no essential difference in the psychology of the performance of the two men. Both had been profoundly inhibited in making their natural responses. Both were bewildered and confused and had a profound need to do something, anything, but in a noncritical indiscriminating manner. The first man stood passively, helplessly, in the strong wind looking after me until time itself or some other stimulus "shook" him out of his state of confusion. On the other hand, George, inhibited in his natural responses, merely passively, automatically, and uncritically followed the example I carefully set for him.

5. In summary, if into any simple little situation evocative of simple natural responses, there is introduced into it just previous to the moment of response a casual simple irrelevancy or non sequitur, confusion results and there is an inhibition of natural responses. The non sequitur is completely meaningful in itself but has no bearing *except as an interruption* upon the original situation calling for a response. The need experienced to respond to the original situation and the immediate inhibition of that response by a seemingly meaningful communication results in an increased need to do something. Quite possibly, this increased need is a summation of the need to respond to the original stimulus and the need to understand the inexplicable seemingly meaningful addition. As this procedure is continued for hypnotic purposes, there often arises an intolerable state of bewilderment, confusion and a compelling, growing need for the subject of this procedure to make some kind of a response to relieve his increasing tension and he readily seizes upon the first clear-cut easily comprehended communication offered to him. In the meantime, he has been presented with a wealth of seemingly related ideas all of which have an underlying implication of primary but unrecognized significance leading to the development of hypnosis or of hypnotic phenomena.

This thinking led to extensive experimentation by deliberately making out-of-character, irrelevant, non sequitur remarks in groups and to single persons. The latter proved to be the better procedure since the variations in individual behavior in group situations tended seriously to interfere but did not render the task impossible.

As originally worked out, the Confusion Technique was based upon the following items of procedure and employed primarily for the purposes of *age regression* before it was recognized as readily applicable to *other hypnotic phenomena*.

The original procedure consisted of the following items:

1. Mention of some commonplace item of everyday living such as eating.

2. Relating that item as an actual fact or possibility for the subject for the current day or *present*.

3. Mention its absolute probability in the *future*, specifying some one particular day of the week, preferably the current day.

4. Comment on its probable occurrence (the eating) on that same day in the *past* week.

5. Comment on the identity of the day preceding the named day of the *past* week, emphasizing that such a day is a part of the *present* week even as it will occur in the *future* week.

6. Add that today's day has occurred last *week*, even last *month*, and that learning the names of the days of the week had constituted a *childhood problem*. (Thus the period of regression desired is subtly introduced.)

7. Mention that, just as in the past, a certain month would follow the *present month* even as the *present month* had been preceded by the *previous month* during which a meal had been eaten on some named weekday. And that weekday had been preceded by another weekday just as the previous week had a day of an earlier ordinal position. (For sake of clarity to the reader, let us assume that the current day is the second Friday of June, 1963, that *next* Friday eating will occur even as it did *this* Friday, and as it undoubtedly did *last* Friday which was preceded by a Thursday just as it was earlier in the *present month* and would be in the *future weeks*. Days, weeks, months, past, present and future are all intermingled.)

Then one proceeds with mention that last month (May) had a Thursday, in fact several Thursdays, each preceded by a Wednesday while the month of April preceded May, another *childhood task* of learning the months of the year. (Thus, from Friday June 14, 1963, by a simple valid statement, an underlying implication of time is employed to arouse thoughts of *childhood*, or any chosen past time, without seemingly direct suggestion to that effect.)

8. This intermittent and varied reference to the present, future and past is continued with increasing emphasis upon the past with an implication of the actual past as belonging to the present and then to the future. Again to clarify for the reader, one might say "Not only did you (Reader, please bear in mind that it is the second Friday of June 1963)—eat breakfast on Wednesday of last week but before that, you ate dinner on Tuesday in May, and June was then in the future, but before May was April and before that was March and in February you probably had the same thing for lunch and you didn't even think of having it next April, but of course on January 1st, New Years Day, you never even thought of the 14th of June 1963. (An implication of possible amnesia developing) it was so far in the future, but you certainly could think of Christmas, December 1962, and wasn't that a nice present you got—one that you didn't even dream of on Thanksgiving Day in November and what a Thanksgiving dinner, so good. (A present tense description of a series of ideas with an emotionally charged validation of the actual past as the present and then the future) but Labor Day came in September of '62 but before that was July 4, but on January 1st of 1962 you really couldn't think of July 4th because it was (this use of 'was' implies a present tense) just the beginning of 1962. And then, of course, there was your birthday in 1961 and maybe on that birthday you looked forward to your birthday in 1962 but that was still way in the future and who could even guess a year ahead about the future? But the really wonderful birthday was your graduation year birthday. Twenty one and a graduate at last!" (An item of fact you have carefully learned and to which you lead and finally state in terms of present reality with utter and pleasing emphasis. Or one could continue as above to the 17th birthday or the 10th or whatever year might be desired.)

9. Thus, there has been a rapid and easy mention of realities of today gradually slipping into the future with the past becoming the present and thereby placing the mentioned realities, actually of the past, increasingly from the implied present into the more and more seemingly remote future.

10. Significant dates which are in themselves indisputable are selected and, as the backward progress in time orientation continues to the selected time, some actual positive strongly tinged emotional event is mentioned.

11. Throughout, tenses are watched carefully and one speaks freely, as in the illustration given of the 21st birthday. It is the year of 1956, hence one speaks joyously of the instructorship that *will begin in September* which is yet to come. (Reorientation in time by implication and emotionally validated by vivifying the emotions of the past.)

12. Throughout the entire time, each statement is made impressively, with adequate and appropriate inflections, but before the subject in his attentiveness has any opportunity to take issue with or to dispute mentally what has just been said, a new utterance compelling his attention has been offered to claim his thought and which arouses more effort toward further new understandings, with only a frustration of effort to respond resulting.

13. Finally, a clear-cut definitive, easily grasped and understood statement is uttered and the striving subject seizes upon it as Rock of Gibraltar in the running flow of suggestions that has kept him helplessly following along. (Graduation Day and Birthday—emotionally potent and coincidental and a valid fact.)

14. Reinforcement of the patient's reorientation in the past by a "specific orientation" to a "general" orientation such as a vague general reference to his "father's job," and by wondering, "Let's see, did it rain the last week," and followed by mention of the instructorship. (Two general vague possible ideas followed by the validity of the instructorship all to fixate the regression to the past as the present.)

15. Following up with the specific statement, "Now that it is all over, (the graduation) what shall we do now?" and let the subject lead the way, but carefully interposing objections to some impossible remarks such as "Let's go down to Lake Mendota and have a swim." (This is "impossible" since a bathing suit becomes an immediate reality). Instead, one agrees that it would be nice to go to Lake Mendota, there to watch the waves, the birds and the canoes, thereby leading to hallucinatory activity and, as this develops, hallucinatory swimming may then follow.

At what point does the subject develop the trance and begin to regress? You have mentioned eating, days of the week, months of the year, a backward succession of years, each in itself and by itself a valid utterance, but in the total context requiring a constant shifting in the temporal orientation of the subject's thoughts and marked by the changing of tenses and along with all this there is aroused an increasing vividness of emotions related to the past. (A personal example may be cited here: While relating to a friend, in great detail the events of a trip made ten years previously in the Rocky Mountains with a car having a floor shift the author, who was driving in a steering wheel shift car which he had driven for more than five years, suddenly saw a red light and sought frantically with his right hand to find the floor shift to put the engine into neutral while his friend watched in amazement. The car was stopped only by the expedient of jamming the brake and turning off the ignition before the author realized that the vividness and extensiveness of his memories about the past trip had extended over into the field of unrecognized associated motor memories.)

To answer the question of when hypnosis develops is difficult to state. If one *wishes to induce hypnosis with age regression as the goal*, one continues until the subject's overt behavior (more easily recognized by long experience) discloses evidence of the desired trance state. However, the process can be interrupted at any point, depending upon the purposes to be served. This will be illustrated later.

To summarize the main points of the above Confusion Technique, the following outline may serve. It is a general form that I have used many times, always with different wordings as partly illustrated in the outline to be given. The outline is put into brief form, and then remodified to insure proper inclusions at the right places of general items of actual personal significance but so that they cannot be

recognized for their eventual significance, but can progressively serve to validate the subject's progress.

Thus, the following might be used as one of the outline forms for the above illustration; to which, when put into use, are added many details with *ready spontaneous modifications* as determined by the subject's reactions.

I am so very glad you volunteered to be a subject	Joint participation in a joint task
You probably enjoyed eating today	Irrelevant—most likely factual
Most people do though sometimes they skip a meal	A valid commonplace utterance
You probably ate breakfast this morning	The temporal present
Maybe you will want tomorrow something you had today	The future (an indirect implication of a certain identity of the past and of today with the future)
You have eaten it before, perhaps on Friday like today	The past and the present and a common identity
Maybe you will next week	The present and the future
Whether last week, this week or next week, makes no difference	The present, future and past all equated
Thursday always comes before Friday	Irrelevant, non sequitur, and valid
This was true last week, will be true next week and is so this week	Irrelevant, meaningful and true but what does it mean? (Subject struggles mentally to put a <i>connected</i> meaning on all this future, present and past all included in a meaningful statement which lacks pertinence)
Before Friday is Thursday and before June is May	How true: But note use of <i>present tense</i> in relation to today's yesterday and to May
But first there is "whan that Aprille with its shoures soote"	Here comes April of the past (remote past) and it also pinpoints a particular area in the subject's life— <i>his college days</i> . (An item of fact predetermined—it might have been in high school—but to introduce Chaucer creates a problem of relating it meaningfully to what has been said but this is a confusing task
And March followed the snows of February but who really remembers the 6th of February	Back now to March, then to February and one does (present tense) remember February 12th, 14th and 22nd. February 6th only offers confusion (It has been predetermined that February 6th is not a birthday or some such event but if it is meaningful, this serves only to impel the subject to validate that day also)
And January 1st is the beginning of the New Year of 1963 and <i>all that it will bring</i>	Thus is given a memory task. <i>It will bring June</i> (already here) but slipping unaccountably into the remote future because January is given a present tense

But December brought Christmas

True, valid vivid memories of the past December and the implied coming of the year of 1963

But Thanksgiving preceded Christmas and all that shopping to get done and what a good dinner

November, 1962 with an *impending urgency to do something in the coming December* an emotionally valid dinner memory, all of 1962. (And there have been many New Years, Christmases and Thanksgiving Days, all strongly emotionally tinged)

From then on, progressively larger steps based upon factual and valid events, Labor Day, Fourth of July, New Year's Day, remembrance that a December of 1961 wish came true and then finally the 21st birthday and college graduation all set up as a final culmination by the quotation from college Chaucer setting a goal for a specific regression in time and so early in the outline and so unrecognizably. (But one is careful to use such a reference as Chaucer only after making sure when there was a reading of Chaucer. Similarly one might make reference to a song of a certain vintage. A few well-placed questions, even with total strangers, obscurely put will yield much information around which the immediate details of the technique can be built.) But bear in mind that while June is the present, it belongs also to all the past as well as to all of his past birthdays for this subject, and also to all past graduations. In regression in time, any small series of stated personally meaningful events can be used and subtly mentioned early in the procedure in some unrecognized form.

Originally in the 1920's, the Confusion Technique was used to induce hypnotic age regression. Numerous manifestations noted, at first by chance and then later by watchful observation, led to the realization that the technique could be variously employed to induce hypnosis itself or to elicit specific or isolated phenomena for either experimental or clinical purposes.

These studies led to a special experimentation when I attempted in 1932 and 1933 to expound the concept of a certain type of spatial orientation found in schizophrenia which had interested me since 1929. I had much discussion of this topic with Dr. Govindaswamy, now deceased, a Diplomate in Psychological Medicine and later Superintendent at the Mental Hospital in Mysore, India, who was spending 15 months in the United States to study American psychiatry. In attempting to outline to him my understanding of how a schizophrenic patient could conceive of himself as simultaneously sitting in a chair looking out a window and at the same time lying on a bed with his eyes closed, I realized painfully the inadequacy of my verbal explanation. He could not follow my explanation of the equal and co-existence of two separate spatial concepts of the self without an accompanying spontaneous comparison or contrast and a consequent evaluative judgment. Accordingly, I volunteered to let him witness and participate in such an experience through the utilization of hypnosis, which was also a modality in which he was intensely interested. This particular instance is cited because it was so well recorded at the time and illustrates so clearly the building up of a Confusion Technique.

To accomplish this purpose, in a large vacant room I stationed two chairs and then Dr. Govindaswamy and myself in a 12-foot-square arrangement, the chairs on one side, we two on the other. The respective positions for the chairs were

A and B, those for us, C and D. Miss K, an excellent somnambulistic subject who had been used extensively in experimental work was then summoned. Miss K had been deliberately selected for the experiment because of her high intelligence, her quick-wittedness, her fluency of speech and her remarkably acute ear for changes in voice inflection and voice direction. All of us are responsive, often unwittingly so, to a minimal change in the spoken voice when the head is changed to a different position and the voice thereby being given a new direction and Miss K was unusually keen in this respect. One might recall to mind the common experience of the uninteresting lecturer who speaks to a spot on the back wall, contrasted to the interesting lecturer whose eyes roam constantly over the audience thereby commanding their attention and giving each member of the audience the feeling that each and all of them are being addressed.

In Dr. G's presence, it was explained to her that she was to develop a profound somnambulistic trance in which she would be in full rapport with Dr. G as well as with me. Shortly, Miss K opened her eyes and looked at me, passively awaiting further instructions.

While Dr. G listened and watched, the author pasted paper labels bearing in small characters the letters A and B on the respective chair seats and Dr. G was asked to note for himself that the east chair was labeled A and the west chair was labeled B. He was asked to take up his position north of chair B and to draw a small circle around his feet with chalk. The author stood 12 feet north of chair A and drew with chalk a small square about his feet.

During this procedure, Miss K stood quietly staring unblinkingly into space. She was then asked to sit down in chair A which was nearest the author, facing the chair B, the one nearest to Dr. G. Miss K took her seat and again passively awaited further instructions.

Since this entire procedure was a specific experimental effort, full notes were to be made by both Dr. G and the author. (Also, without disclosing his intentions, the author excused himself to correct an oversight, left the room briefly, and secretly summoned Miss F, an assistant, who had worked previously with the author and was well trained in how to record in full his experimental procedures including both words and action. She was asked to remain out of sight behind a certain curtain but where she would have a good view and to make a full shorthand record of all events).

Slowly, distinctly, Miss K was told, "I wish to teach Dr. G something about geography (spatial orientation as a term was purposefully avoided) and I need your help. You are to do exactly as I say and nothing more with *one exception*. (Italics here indicate a special inflection of slow intense emphasis with a slight deepening of the voice.) That exception (no special inflection on this use of the word 'exception' had been given) is this. You will note mentally and remember whenever I do something that Dr. G does not do and vice versa. This you will do separately and apart from all the rest you are to do and tomorrow, when you do some typing for Dr. G and for me, these separate memories will come to your mind and you will fit them into the typing you are doing without saying a word about it to either of us.

"Now for today's work. The special task I have for you to do is this: You are to sit right where you are *continuously, continuously, continuously*. (The same special inflection used in the preceding paragraph with *one exception* was again

used with the word 'continuously') without ever moving. Dr. G will watch you and so will I. Yet, I want you to know that that chair (pointing at A) you are in is *here* to you (pointing at Miss K) and *that* chair (pointing at B) is *there* but as we *go around* (the same special inflection mentioned above again being used for *go around*) the *square*, I am *here* and you are *there* but you know you are *here* and you know I am *there* and we know *that* chair (B) and Dr. G are *there* but he knows he is *here* and you are *there* and *that* chair (B) is *there* and I am *there* and he and I know that you and *that* chair (B) are *there* while you know I am *here* and Dr. G and *that* chair (B) are *there* but you know that Dr. G knows that he is *here* and you are *there* and *that* chair (A) is *there* and that I who am *here* am really *there* and if *that* chair (B) could think, it would know that you are *there* and that Dr. G and I both think we are *here* and that we know that you are *there* even though you think you are *here* and so the three of us know that you are *there* while you think you are *here* but I am *here* and you are *there* and Dr. G knows that he is *here* but we know he is *there*, but then he knows you are *there* while he is *here*." All this was said slowly, carefully, impressively, while Miss K listened intently, and the author strove to record his statements and tried to give Dr. G an opportunity to record them. (His record was later found to be most confused and incomplete as was the author's record but fortunately Miss F obtained a full and accurate record because of her previous training in recording the author's Confusion Techniques).

Shortly, Dr. G appeared to be unable to record any of the author's impressively uttered statements, glanced at and traced with his finger the chalk mark around his feet, and glanced at the chalk mark about the author's feet. The instructions were continued, "And now Miss K, slowly at first and then more and more rapidly until you are talking at a good speed, explain to Dr. G that while he thinks he is *here*, and you are *there* that you are *here* and that he is *there* even as I think *that* chair is *there* and I am *here* and you are *there* and just as soon as you are saying it rapidly and Dr. G is beginning to understand that he is *here* and you are *there*, still talking rapidly, you slowly change from *this* (pointing at A) chair to *that* (pointing at B) chair but keep his attention on your explanation of how each of us can think *be here* and *be there* or *be there* and think *be here* and then when he sees you sitting *there* and thinks you are *here*, gently return, still explaining and even laughing at him for thinking you are *there* when you are *here* and then not recognizing that you are *there* while he is still thinking you are *here*."

Miss K then took over, first speaking slowly, then with increasing rapidity. At first, Dr. G ceased to try to record and it soon became impossible for the author to record Miss K's rapid utterances identifying *here* and *there* variously employed.

At about this time, the author noted horizontal nystagmus in Dr. G's eyes, and Miss K, still talking rapidly, reiterating variously the author's explanations of *here* and *there* glided gently from chair A to chair B. Dr. G checked visually his chalk circle, the author's chalk square, and suddenly shouted, "You are sitting *here* in this chair" to which Miss K replied simply, "Yes, I am sitting *here* (changing places) in that chair *there* (changing places again).

The horizontal nystagmus in Dr. G's eyes became worse and he seized a piece of chalk, and walked hastily over and marked a small X in front of one chair and a small O in front of the other chair. The author promptly signaled Miss K with his right hand, pointed at the chalked X and O with his left hand and made a

covering movement with his foot. Miss K kept on talking *here* and *there*, gliding back and forth between the two chairs and sitting first in one and then the other, each time covering the X or the O with her foot while Dr. G said "You are sitting in the X chair, no, the X is gone but the O is *there*, so you are sitting in the O chair but the O is gone (Miss K had quickly moved over) and the X is *there* but the X is gone and the O is *here* and so you are *there*."

His eye nystagmus increased greatly, he complained of severe vertigo, nausea and a painful headache. The experiment was discontinued, Miss K aroused and dismissed, and the author deliberately began a continuation of the original question of dual spatial orientation in schizophrenia. Gradually, Dr. G's headache, nausea and vertigo disappeared, he picked up his notebook, began to read and seemed suddenly to have a partial sudden recollection of some of the experimental procedure.

He explained that as the author had given his original instructions about *here* and *there*, he had experienced much confusion but that when Miss K had taken over and increased the rate of her speech he had felt himself becoming dizzy and that suddenly the room began turning around and around. This he had attempted to stop by making X and O marks but those seemed to shift back and forth and to disappear unaccountably even though the chalk circle and square remained constantly present. He appeared to have no realization that Miss K had actually changed back and forth from one chair to another, only that the room kept whirling around with increasing subjective distress and confusion on his part.

The next day, Miss K was asked to type her recollections of yesterday's experimental procedure. She promptly developed a spontaneous trance and remained inactive. She was given instruction to recall and given a post-hypnotic suggestion that she then type her recollections. She explained in the trance state, "I was so busy watching Dr. G and you and remembering *here* and *there* that I can't remember. I was just concentrating on saying *here* and *there* in different ways and being sure of what was being said just to me and what was being said to both Dr. G and me by the inflections of your voice. When you first said "one exception" and then said I was to sit 'continuously, continuously, continuously' with that same inflection three times I knew you were saying one thing to Dr. G but something different to me, and I had to watch for it (the inflection) again because I knew you meant something special."

Nevertheless, in the waking state Miss K readily typed my notes and Dr. G's, but it was noted that she apparently developed brief spontaneous trances whenever she inserted parenthetically various items in both Dr. G's record and mine, arousing spontaneously and continuing her typing without apparently noticing the insertions. (Much later I thought of time distortion and its possible bearing on Miss K's spontaneous trances and parenthetical insertions in her typing without there being any interruption of her typing. Perhaps, even quite possibly, she relived in distorted time the events of the previous day despite her trance assertion of inability to remember. These parenthetical insertions were less complete, but in good accord with Miss F's full record).

In Dr. G's effort to record, Miss K particularly noted his failure of recording certain notes, his marking of the X and the O, his glancing at and fingering the chalk circle about his feet and glancing at the square about mine, and his apparent confusion when he emphatically announced that she was sitting in chair A and then

noting that she was actually in chair B without having noticed her shifting of her position. She also noted his confusion about the appearance and disappearance of his marks of X and O and she had observed the nystagmus. (This latter Miss F did not note—she could not see it—but she did note unsteadiness and arm waving as if to keep his balance. This latter Miss K noted).

She also noted many gaps in the author's record because of his intense concentration on the task and correctly interpreted the author's notations of X and O and his writing of them crossed out or not crossed out as meaning "covered up" and "in view."

Miss F's account was fully comprehensive but could not be read by Dr. G, despite repeated attempts, without developing vertigo, nausea and a headache. (This recurrent reaction is a most suggestive experimental induction of profound psychological and physiological responses). Reading by Dr. G of his record with Miss K's parenthetical insertions elicited sudden but not complete recollections, such as, "That's right, she did change chairs, only I didn't see her do it," and "She put her foot on the X, that's why it disappeared." However, he could not fully recall the entire experience. After this experiment, Dr. G sought out schizophrenic patients who showed altered spatial orientation for special interviews and explained that their assertions had become much more meaningful to him. He also expressed much sympathy for certain patients who complained of distress from altered spatial orientation. It may be added that he was unwilling to be a hypnotic subject but he did inquire several times if he had been hypnotized on that occasion. An evasive answer each time seemed appropriate to the author and was each time readily accepted by Dr. G. That he did not want to know with certainty is a reasonable interpretation.

As a further test of this procedure with Dr. G, it was employed separately on three other subjects, all having a doctoral degree in clinical psychology. The first such subject, Mr. P from Princeton University, personally disliked the author, but was an ardent experimentalist who did not let his emotions interfere with his work. In fact, he tended to dislike far too many people, but would collaborate whole-heartedly with them in experimental work.

The second subject, Miss S of Smith College was interested in hypnosis but opposed for no reason that she knew to being a subject. She had observed others going into a trance unexpectedly without having been asked to do so or without volunteering while observing the induction of a trance in volunteer subjects. She had remarked to the author that she was too wary to allow this ever to happen to her and when asked what she would do if it were to happen she replied, "Once would be enough. Then I'd see to it that it never did again."

Mr. Y of Yale University had done some work with Hull, had tried many times to go into a trance as an experimental subject, and had never succeeded. Hull termed him an "impossible subject." While he was highly intelligent and extremely capable of working out an adequate protocol for controls, subjects and procedures, he always insisted on a few rehearsals of his experiments with nonsubjects, even in simple nonsense syllable learning experiments.

All of the subjects, including Dr. G, were in the age range of 27-31. Separately with each of them, the author had discussed the problem of spatial orientation as observed in some schizophrenic patients and then proposed the possibility of doing a hypnotic experiment on the matter by using one of his subjects. Each was interested and expressed interest in being an observer.

Exactly the same procedure as had been employed with Dr. G was followed with the exception that the term "spatial orientation" was used instead of "geography" as had been done with Dr. G. The reason for this was that in Dr. G's case, the author did not know just what Miss K would understand by "spatial orientation" but he did know that she understood the game of "I am here and you are there and New York is there," etc.

Another difference was that Miss F had read all the reports on Dr. G and was placed so that she could observe the subjects' eyes and still be out of their sight. Secretly, Miss K had been given hypnotic instructions to have an amnesia for Miss F's presence.

Much re-reading of the Dr. G record enabled the author to proceed with greater ease and comfort and both Miss K and Miss F were better qualified for their tasks.

The results obtained with all three subjects were comparable to those secured from Dr. G with minor individual differences. None used the chalk, as available to them as it had been to Dr. G, to mark an X or an O to identify the chairs A and B. Each personally inspected the seat of the chair on which the author pasted the letters of A and B. Mr. Y made this inspection three times for each chair, while Dr. G merely accepted the author's statement. Miss S and Mr. P merely watched the author draw the chalk circle and square about their feet and his, but Mr. Y glanced back and forth at the circle and square.

With Dr. G, a little over an hour elapsed before the experiment was concluded. With Mr. P, who was the first of three to be used, 35 minutes were sufficient. Miss S was the second and 45 minutes were needed. Mr. Y needed only 25 minutes.

All three developed nystagmus, Mr. P and Mr. Y by their movements manifested vertigo, Miss S complained verbally of feeling dizzy.

None noticed Miss K slipping back and forth from one chair to the other.

Mr. P was noted to become angry first at Miss K and then at the author in addition. (Miss K's record and that of Miss F typed the next day, showed respectively (getting angry me), (more angry) (still angrier me and Dr. E) (yelling at us) (furious) and (getting mad at K) (madder), (really mad both), (yelling and then screaming at both Miss K and Dr. E).

Miss S was noted by both suddenly to glance about the room in a bewildered way and to complain of a severe headache and general physical distress.

Mr. Y was noted to keep moving his arms about as if to balance himself as his nystagmus grew worse. Then suddenly, he closed his eyes and stood passively presenting the appearance of a deep hypnotic trance.

The experiment for Mr. P was concluded by signaling silence to Miss K and stepping over to Mr. P and gently leading him outside the experimental room and closing the door behind us, the author resuming the conversation of spatial orientation at the point that it had just reached at the moment of beginning to open the door of the experimental room to perform the experiment. This had the effect of reorienting him in time to the moment at which we were about to enter the experimental room and had the effect of arousing him from an obvious hypnotic trance and with an amnesia for that trance state. Glancing at my watch, I remarked that we had spent so much time in discussion that the experiment would have to be postponed and the suggestion was offered that arrangements would be made at a later date and he was dismissed in an ordinary waking state.

The same procedure was employed with Miss S and Mr. Y and with similar results.

These experiments were all done in one day and assignments were so arranged that there was no opportunity for the three to meet that day.

The next day, Miss K and Miss F typed up their respective reports on each subject. After reading them through and comparing them with each other and with the author's own memories, they were set aside for several days.

However, the next day Miss S came to the author with a peculiar complaint to the effect that she had to get some material out of the "Observation Room" but that she had developed "a peculiar phobia all of a sudden." This was a fear of entering that room (it had been the experimental room) and that when she had forced herself to open the door, she had developed an excruciating headache. She wanted to know what was wrong. The answer was given that she was a clinical psychologist and had just described a phenomenon that she might like to explore on her own for a day or so, especially since she had said the headache had disappeared immediately upon closing the door.

Care was taken to have adequate contact with Mr. P and Mr. Y. Nothing new or unusual was noted. Nor was anything of note observed by Miss F or Miss K.

That weekend, each was called separately into the office and each was given the accounts of the other two subjects to read. Each read those accounts with interest but no seeming recollection of their own experience. They all thought the whole procedure was a most interesting complicated hypnotic experiment and asked if they might be present to observe, should the author ever repeat the experiment. Each was then handed the record on Dr. G. Before each had finished reading the account, they realized that Dr. G referred to Dr. Govindaswamy. They then took the other records and studied them, speculating upon the possible identities of the other subjects without any success (each had been given the initial of the institution from where they came). Only Miss S ventured the speculation that Mr. P's record sounded like something Dr. M (Mr. P's actual initial) would do, but she went no further than that in her speculation.

Each was given his own record to read. Mr. P read his, commented that he would probably feel the same way if that sort of thing were done to him.

Mr. Y's only comment was, "Well, that chap figured out a good escape for himself."

Miss S read and reread the record on her with utter intentness and with an expression of growing understanding on her face.

Finally she looked up at the author and said, "So that's it. No wonder I had that phobic feeling and developed a headache. This is a record on me—". With this she jumped up from her chair rushed down the corridor and returned in a few minutes to report, "It's me all right, I'm dead sure. I have a total amnesia, but I'm afraid of that room, I got a headache the moment I started to open the door. It vanished when I yanked the door shut. But I still don't remember a thing about it, but I am completely convinced that this is a record on me." Then she demanded, "What are you going to do about my phobia and headache?"

Reply was made, "That will be very simple. I can deal with it effectively but I would like to do it in a way most instructive to you." Very warily she said, "And what is that?" My reply was to pick up the telephone and ask Dr. T (Mr. Y) to come to my office. Upon his arrival, I asked him, "Do you mind showing Dr. W (Miss S) something?" He agreed readily and the three of us walked down the corridor to the "Observation Room." There I suggested that we all enter it and

would Dr. T go first? He did so readily, but immediately developed a deep trance state as he entered the room. Motioning to Dr. W to step back out of sight, I stepped inside, took Dr. T by the arm and gently led him outside and again resumed my original discussion of spatial orientation, again reorienting him to the time of the original approach to that room. He wakened with a total amnesia and I commented that it was really too late to attempt an experiment that day and we returned to my office and as we all took seats I handed him the report on himself. He glanced at me quizzically, at the record casually, and then, with a look of bewildered amazement, practically shouted, "That's me, that's me." He added, "That happened last Monday and when we came into the office, I was still thinking it was Monday."

Dr. W remarked, "And this record on Miss S is mine. When I saw that massive recollection by Dr. T, I experienced the same phenomenon." She paused thoughtfully, darted out of the office and shortly returned to ask, "Why don't I have the phobia and headache now?"

Reply was made that much earlier she had commented that she was "too wary" to allow an unexpected trance induction in her, but that if it ever happened, she would see to it that it never happened again. Hence, her own unconscious mind had prevented her from entering the room where she had unwittingly gone into a trance lest a spontaneous trance such as Dr. T had just demonstrated might occur. This her unconscious mind appreciated, hence her "protective phobia." This had led her immediately to seek out the author when she could have gone to a number of other physicians. Thus, her unconscious had recognized that he was responsible and that the reply he had made carried an implication that there was no danger but an opportunity to learn. Hence she had readily accepted the statement that, since she was a clinical psychologist, she could spend a few days thinking about it. By implication this signified that her phobia and headache could and would be corrected.

Then when she witnessed Dr. T's massive recollection, she was unconsciously impelled by her own spontaneous massive recollection to put it to test by dashing to the Observation Room and entering it with no fear of unwittingly developing a spontaneous trance.

The question then arose about Mr. P, about whom Dr. W immediately declared, "When Dr. M read that account of Mr. P, he said that was just the sort of a response he would make in such a situation. Let's call him in and how shall we handle it?"

The author suggested that when Dr. M arrived, he would hand each of them their own records asking them to reread them and that the author would sit so that he could see the page numbers on Dr. M's record. They were told that all three of them would be instructed to reread the records previously read by them but that they (Dr. W and Dr. T) were to turn pages as if they were being read, but that they should primarily watch Dr. M's face. Then when the author cleared his throat, Dr. W was to say quietly, "I am Miss S" whereupon Dr. T would follow suit by saying, "I am Mr. Y." Dr. M read the record of Mr. P assiduously and when he reached the place at which Miss F described Mr. P as "yelling and screaming at Miss K and Dr. E," the author cleared his throat and Drs. W and T made their remarks. Dr. M started violently, flushed deeply and in a tone of utter amazement, he declared, "Wow! I certainly was raging mad right then."

He went on, "The whole thing is completely clear now in my memory. All week I've been haunted with a feeling that I knew something that I didn't know. No wonder I said that I would act like that fellow if that sort of thing were done to me."

Immediately, Dr. W took Dr. M's hand and led him down the corridor to the Observation Room. She opened the door and asked him to step inside. Dr. M unhesitatingly walked in, looked around and remarked, "That's right. This is where it happened." Thereupon he began to reconstruct verbally from memory the original experimental management of the room.

Thus did Dr. W demonstrate to her satisfaction that unconscious knowledge shared with the conscious mind would preclude a spontaneous trance such as Dr. T had developed. She asked what would have happened had she gone into the Observation Room before recollection had been made possible for her. She was told, "You would have developed a spontaneous trance, recognized that fact unconsciously and then you would have aroused immediately with most unkind thoughts and attitudes toward me, and it would have taken a long time to get back into your good graces."

Later, Dr. W sought hypnotherapy for chronic dysmenorrhea accompanied by a severe headache; Dr. T acted as a subject in various experiments, and the attitude of Dr. M. became much more friendly toward the author.

Almost exactly the same technique has been used repeatedly by the author for clinical purposes. Patients who enter the office and state frankly that they are resistant or who merely manifest an overt resistance to therapy and yet are obviously seeking it are offered the casual comment that as they sit in *that* chair they are resistant but would they be resistant were they sitting in *this* other chair or would they be nonresistant in *this* chair and thus leave their resistances in *that* chair they now occupy; that they can mentally consider changing chairs and sitting *here* in *this* one and leaving resistance in *that* chair *there* or sitting in *that* chair *there* while their resistance remains *here* in *this* chair; that they might try sitting in *that* other chair *there* without resistance and then coming back to *this* chair *here* and taking up their resistances either to keep or to leave them in *this* or *that* chair or *here* or *there* with as much and varied repetition as is needed.

Thus they are given a confusion in relation to their resistances, and in a manner inexplicable to them. There results an unwillingness to keep the confusion, and hence they tend to relinquish their resistances and to cooperate with the therapy they are seeking. Sometimes a trance ensues, sometimes not, depending upon the intensity of their needs.

Clinically, the Confusion Technique has been used in various other instances. Two such cases will be cited, similar in character, both seeming to be suitable patients for a Confusion Technique, and each having a similar complaint. One was a 28-year-old woman, the other a 45-year-old man. Both complained bitterly of a complete hysterical paralysis of their right hand whenever an attempt was made to use it in writing and both had positions requiring writing and both were right-handed. In all other relationships and activities, there were no right-handed difficulties, not even in typing. But a pen, a pencil, a stylus or even a large stick with which to outline on the floor their name, a letter, or even a line, straight or crooked, resulted in a completely rigid paralysis of the right hand. Like all such patients this author has seen and has had reported to him by

colleagues, both patients were adamant in their refusal to learn to write left-handedly, even to sign their names. Experience has also taught the author that any insistence upon learning to write left-handedly is likely to cause the loss of the patient, an experience also reported by colleagues.

Remembering the old childish game, "Put your *right* hand in front of you over your heart; now really pretend to throw away your *left* hand by putting it behind you. Now, *which hand is left?*" Inexplicably to the child, he finds himself in the difficult position of describing his *right* hand as his *left* hand. Furthermore, one can only *write right* from *right* to *left*, one cannot *write right* from *left* to *right* and *write* is not *right* nor is *right write* while *left*, though *left*, can *write* though not be *right*, yet *left* can *write right* from *right* to *left* if not from *left* to *right*.

With this sort of thinking in mind, an extensive history has taken (actually not really extensive since such patients in the author's experience are definitely restricted in the personal information they can offer) to obtain items of personal significances.

Another appointment to give the author adequate opportunity to work out a technique was given each patient.

In this preliminary preparation, careful outlines were made in which to include meaningful personal items as irrelevances in a Confusion Technique centering around the words *right*, *left*, and *write*, intermingled with minor personal details to make them applicable respectively to each patient.

The woman was the first patient and, as the Confusion Technique was gradually intruded into the initial casual conversation, she became increasingly confused, uncertain, and finally developed a good trance state when told in prolonged detail that "it is *right* and good that your *left* hand is now on the *right* (it had elaborately and quite forcibly been placed by the author on her *right* shoulder) and that your *right* hand which cannot *write* is on the *left* (thigh, thus to establish a specious anatomical relationship). And now your *right* hand that cannot *write* is on the *left*, you have the hand on the *right* (shoulder) to *write*."

With further elaboration and repetition, and several further trances with carefully worded post-hypnotic suggestions, the patient made a permanent transfer of her right-handed writing disability to her left hand to which was added by post-hypnotic suggestion "a peculiar not unpleasant but interesting dollar size spot of coolness in the back of your left hand." Three years later, she was still working steadily, still had her left-handed paralysis whenever she attempted so much as to pick up a pencil with it, and the "cool spot" was still present and a source of childishly intense pride. Clinically, she was regarded as a therapeutic success although there was much about her that warranted change but with which she was entirely satisfied. For example, there was her extreme untidiness in her housekeeping and her extreme tardiness in her many social activities, such as arriving two hours late for a birthday dinner prepared for her by a friend who had made repeated telephone calls to speed her arrival and to avoid keeping the other guests waiting. Nevertheless, she was well-liked or at least extremely well tolerated and she continued to be adequate with respect to right-hand functioning.

An even more carefully devised Confusion Technique was worked out for the man who was of decidedly superior intelligence, a more difficult problem, and much quicker-witted. Since his work involved insurance, the words, "*insurance*, *assurance*, *insure*, *assure*, *reinsure* and *reassure*" were intermingled with *write*,

right, left, and, fortuitously, a relative of his was "named Wright but was not a wheelwright though he could wheel right around right and thus go left which would be right." In other words, the more difficult technique simply involved a more elaborate play on words and more utilization of various items taken from the patient's history together with quicker and more confusing changes of tense. In no way could there be secured a shift of his disability from right hand to the left. However, it was possible in the trance state to get him to accept his disability resignedly (perhaps as a measure of escaping his confusion), to give up struggling to overcome it, and to accept a promotion previously offered him many times which did not require writing, and which he had consistently refused on the grounds of, "I'm going to lick this thing (the writing disability) even if I never do anything else." He was also rated as a therapeutic success even though several years later he again sought out the author for another attempt at therapy for his writing disability but he was easily put off with a promise to try again when it was most convenient for him. To date, he has found no convenient time.

The first Confusion Technique which was discussed in this article, and which was also the first worked out by the* author to involve a time disorientation, offered a relatively easy means for the development of confusion and to use the confusion to elicit age regression. However, careful observation of such use soon disclosed other possible variations and applications. Accordingly, a whole series of procedures was worked out, first in outline form and then by filling in details permitting the evocation of a particular state of hypnosis, of specific phenomena and of isolated phenomena.

Another item of particular interest in regard to the Confusion Technique is the reaction of both experimental and clinical subjects. That of the latter, because of their therapeutic motivation, often lose their resistances and simpler techniques can then be employed. Occasionally, while resistances persist, they do not seem to mind repetitions of the same or varied forms of the Confusion Technique.

With experimental subjects, the reactions vary greatly and sometimes in an intriguing way. For example, Miss K had had many variations of the Confusion Technique employed on her and she always responded readily to the same or to variations of it. Additionally, in the trance state she was much more adept than the author in using a Confusion Technique on other subjects and it mattered not whether it had been used on her or merely, as above, described for the first time to her in the trance state.

In Miss F's case, she too responded repeatedly to the same or other Confusion Techniques. However, she could not use a Confusion Trance when she was either in or out of hypnosis. In fact, most subjects while in a trance and who have been hypnotized by a Confusion Technique seem unable to use it, although in the trance state they will use successfully the ordinary traditional techniques even when they fail to be able to induce a trance in the waking state. Indeed, long experience has disclosed that the easiest and quickest way to learn to induce a trance is to be hypnotized first, thus to learn the "feel" of it.

It is also of interest that subjects who respond readily and repeatedly to Confusion Techniques are likely to develop a trance when listening to a Confusion Technique being used on someone else. Miss K and Miss F, however, were remarkably competent secretaries, and could listen to the Confusion Technique previously used on them, and later record that same technique being used word

for word upon someone else and make a complete record with no hypnotic response on their part. Apparently, the presence of their sharpened pencils and the task constituted an adequate counter-set against any hypnotic response. Also, upon request, both could record in shorthand in the trance state the Confusion Technique used on someone else. It is of interest to note that the measure of using a Confusion Technique to induce a trance in them, and then having them in the trance state record the use of the same technique on others with slight subtle alterations pertaining to them as persons did not affect their trance state or ability to record.

Miss H and Mr. T were excellent subjects for either traditional or the Confusion Techniques. However, after a few experiences with the Confusion Technique, they reacted by bypassing it and developing a trance at once no matter how subtly the author made his approach. As they would explain in the trance state, "As soon as I experienced the slightest feeling of confusion, I just dropped into a deep trance." They simply did not like to be confused. Neither of these subjects, fully capable with more common techniques, could seem to learn to use a Confusion Technique or even to outline a possible form. There were others who responded similarly.

Mr. H (no relative of Miss H) responded readily to various Confusion Techniques, spontaneously discovered that he could use them in the trance state and that he could conduct experiments on other subjects while he was still in the original trance I had induced in him by a Confusion Technique, and later investigated his waking capacity to devise and use effectually Confusion Techniques. In this connection, his first spontaneous discovery of his capacity to use a Confusion Technique will be related here as an interesting and informative example.

Professor M at Yale University was highly critical of Clark L. Hull's work there and most disbelieving of hypnosis as an actual phenomenon. He sought out the author for further enlightenment about hypnosis and to see if the author could duplicate some of the hypnotic studies being made at Yale University. He was a psychologist himself, had never done any hypnotic work and was not yet convinced of the validity of hypnosis by the studies to date at Yale. He was frank and free in his statements of his understandings and asked if the author would demonstrate hypnosis to him and perhaps duplicate some of the things that had been done by Hull and his students.

After some thought, the author agreed and summoned by telephone two excellent somnambulistic subjects. Upon their arrival, they were introduced to Professor M who explained simply and fully his attitudes and wishes. Both subjects expressed a willingness to do anything he wished if the author approved.

This approval was given by suggesting to Miss R who had a Ph.D. in psychology that she hypnotize Mr. H and demonstrate hypnotic phenomena fully, in accordance with Professor M's request. The author then excused himself after explaining to both Miss R and Mr. H that they would remain in rapport with the author despite his enforced absence at that time to work on an ergographic study of fatigue abolition by hypnosis which was under way with another colleague. It was also added that the author would be absent for about an hour, possibly more, hence Miss R could take her time in whatever Professor M wished.

When the author returned about an hour later, he was confronted by a be-

wildering sight. Professor M was sitting at the desk ineffectually trying to make notes with a bemused and puzzled expression on his face. Miss R, who had been told to hypnotize Mr. H, was most obviously in deep somnambulistic trance. Mr. H was also in a deep somnambulistic trance. Only Mr. H retained rapport with the author, manifesting it by looking up at the author as the author entered the room. Miss R apparently was unaware of the author, despite the fact that her eyes were wide open, and the author had immediately asked, "What has been taking place, Miss R?"

Her apparent failure to hear the author and the total situation itself suggested that a record be made of the situation. Miss K was immediately summoned and upon her arrival with notebook and pencils, the author stated, "Maintain the status quo. Now Mr. H, are you in a trance? And is Miss R in a trance?" To both questions, he answered "Yes." "Are you both in rapport with me?" "No." "Who is, and why?" "Just me. I told Miss R to be in rapport only with me."

The author immediately said, "Stay as you are, maintain the status quo, do nothing more. I am taking Professor M out of the room for a while, and the two of you remain as you are, inactive. Is there any comment you wish to make about Professor M?"

Mr. H said simply, "He recognizes hypnosis as a genuine thing now," but made no response to the presence of Miss K or the professor.

Professor M, Miss K and the author went into the next room. Systematically, Professor M was asked what had happened.

In summary, he explained that Miss R had induced a "deep trance" in Mr. H by hand levitation and had then used him to demonstrate anesthesia, catalepsy, amnesia, positive and negative ideomotor and ideo sensory phenomena, hyperamnesia, post-hypnotic suggestions, trance awakening and reinduction.

In relation to each of these demonstrations, she had asked Professor M to make his own tests of each phenomenon. This had convinced him that he was observing a most interesting and valid phenomenon.

When Miss R reinduced hypnosis in Mr. H, Professor M stated that Miss R had asked Mr. H if there were anything else that might be done to instruct Professor M. Mr. H had answered with a simple "Yes." She then asked if he would do it. Again he replied with a simple "Yes," but made no move of any sort. She had then asked, "Well, what is it?" To this he replied, "Can't tell, just do!"

The professor then said, "That was when I really got my eyes opened. Mr. H slowly got up out of the chair where he was sitting with his eyes open and unblinking, pupils dilated and apparently lacking in peripheral vision. He walked over to Miss R, took her hand very gently, lifted it up slowly and softly told her to go deeply asleep in a deep trance. Then when she started to say something, he began to talk in a very confusing way about you and me and Miss R and him and hypnosis and demonstration and ergographs and phenomena and I got so confused that I didn't know what was happening until I suddenly realized that Miss R was in a trance and that he was too. Neither one took any notice of me, and he asked Miss R to do a lot of things comparable to what she had him do but he added some. For example, he told her to awaken with an amnesia for her name and whereabouts. At first, I thought she was awake and I asked her her name but she didn't seem to hear me and Mr. H. didn't seem to hear me either. I shook them both by the shoulders but they made no response. Then she seemed to be

frightened so he told her to sleep deeply and feel comfortable and at ease. I was trying to think this through when you came in. I guess from the questions you asked, you grasped the situation."

We returned to the room where Miss R. and Mr. H were waiting passively.

Mr. H was told to awaken. He did so at once and a few simple questions disclosed the fact that he was reoriented in time to the author's announcement of his impending departure for the ergograph experiment.

The author then spoke to Miss R but she failed to make any response. Mr. H looked astonished and bewildered but before he could say anything, the author quickly intervened and asked Mr. H to tell Miss R to listen to the author. This he did and the author said, "Is there anything you would like to say to me now that I have come back?" (This was a disguised instruction for her to arouse from the trance state.)

Her reply was one of instant arousal with a temporal orientation to the time at which she had reinduced the trance state in Mr. H. She replied simply that she had demonstrated all the usual phenomena to Professor M but that the author might wish to take over, explaining that Mr. H. was still in a trance. Immediately Mr. H declared, "No, you are the one in a trance. I just had to transfer rapport to Dr. Erickson so he could talk to you and he hasn't yet told you to rouse up from the trance."

In bewilderment she answered, "No, you are in a trance, but I don't understand your behavior."

For another hour we let the two of them try to solve the situation while Miss K took notes.

Both had amnesia for their own trances, both believed the other to be in a trance, both could recognize that the other was behaving as in a waking state and neither could elicit trance behavior from the other, nor could they even agree on the time. (I had confiscated Miss K's and Professor M's watches and removed mine, and neither of them had a watch).

Miss R was certain that I had just returned after an hour's absence, and Mr. H was equally certain that the author was about to depart and Miss R about to begin her task. Both could not understand Miss K's presence and her note-taking nor could they understand the refusal of Professor M and the author to clarify matters.

Finally they were dismissed still arguing, and Miss K typed up her complete records. Later, Professor M made another visit and they and Miss K were summoned. To Miss R and Mr. H, the issue was still unsettled and neither seemed able to follow with recognition their respective trance experiences when reading Miss K's typewritten account.

However, interviewed separately in a deep trance state, both recalled all trance events, except that Mr. H had to ask Miss R to reestablish rapport with the author at the time he had withdrawn it before she could continue to relate her experiences at the author's request.

Post-hypnotic suggestion to them both that they recover full waking memories of their total experiences were successful, and this established a most extensive topic of discussion with them and between them and others.

As for Professor M, he later did extensive experimental work with both Dr. Hull and the author.

Several years after this incident with Miss R and Professor M, for no known

reason, Mr. H lost completely for a number of years his interest in but not his respect for hypnosis.

Then one day, he was confronted with the statement by the anesthesiologist and the surgeons that an elderly friend of his, absolutely needing a serious operation, would not survive the combination of surgical shock and chemo-anesthesia. Since Mr. H then had his medical license, he persuaded the reluctant surgeons to operate upon the patient while he used a Confusion Technique to induce a trance state and then a spatial and situational disorientation to effect a hypoanesthesia and the patient underwent extensive abdominal surgery while hypnotically hallucinating a visit at home with Dr. H. His reason for using the Confusion Technique was that the patient and her-relatives had been informed that surgery would result in nonsurvival. The patient actually made an excellent recovery and Mr. H or rather Dr. H now uses hypnosis extensively. But he does not want to go into a trance nor can he give the author any explanation of why this is so nor can he explain his long period of personal disinterest in it.

There is also another type of subject who first reacts well to the Confusion Technique and then turns violently against it. This can be best illustrated by the following eloquent statement:

"I have always felt somewhat annoyed and distressed by the Confusion Technique, and I have resented its use, but initially I was willing to listen and cooperate as best I could. Part of my resentment was undoubtedly due to my own mental pattern of thought; I always like to grasp each idea and organize my thoughts before proceeding. However, I went along with the confusion suggestions and I know they worked on me, although not as well as other techniques did."

"At the present time, they will not work on me. No matter how deep a trance I am in and how cooperative I am, I simply stop listening if that type of suggestion is begun. Nor will I make any pretense of listening. If the operator insists on keeping on talking, I shut off my hearing (self-established hypnotic deafness) and I may wake up—feeling strongly annoyed."

"I can pin-point the changeover from unwilling and somewhat resentful compliance to flat refusal to listen to any confusion suggestions. One day, I was trying to decide whether or not I ought to disclose to the operator some information—I am not certain what it was but I believe it was some information about the work at hand concerning which I was not sure whether or not I ought to disclose it. The operator was seeking that information and suddenly tried a tactic to confuse my thinking—namely, a topic to distract me was mentioned as I was preoccupied with something else, and the operator felt that the information was urgently needed. I cannot remember the confusing way in which the operator urgently demanded the information and attempted to distract me. I felt a surge of anger—I did not reply. Upon thinking it over now, I realize that I thought the tactic was unfair—trying to rush and confuse me into replying instead of allowing me to make a decision based on my considered judgment. I realized too, either right then or possibly the next time the Confusion Technique was attempted on me, that it was basically the same thing and it made me angry too. I'm all through with it. It won't work again."

Such indeed is the case. Yet for other techniques, this subject is remarkably responsive. And as the careful observer will note, subjects both experimental and clinical often have definite preferences which should always be respected. Thus

one subject may object strenuously to a relaxation technique but like the hand-levitation technique and at another time be responsive only to yet another technique.

The values of the Confusion Technique are twofold. In experimental work, it serves excellently to teach the experimenter a facility in the use of words, a mental agility in shifting his habitual patterns of thought and allows him to make adequate allowances for the problems involved in keeping the subject attentive and responsive. Also it allows the experimenter to learn to recognize and to understand the minimal cues of behavioral changes within the subject.

Clinically, it is of much value with patients desperately seeking therapy but restricted and dominated by their clinical problem and uncontrollable resistances which prevent the initiation of therapy. Once these resistances are circumvented, there is then the possibility of securing the patient's cooperation in correcting both his clinical problem and dissipating the resistances. A final value is that long and frequent use of the Confusion Technique has many times effected exceedingly rapid hypnotic inductions under unfavorable conditions such as acute pain of terminal malignant disease and in persons interested but hostile, aggressive and resistant.

Perhaps it would be well to give an example of a Confusion Technique used in handling resistant disbelieving cancer patients, one suffering continuous pain and one suffering from irregularly periodic bouts of excruciating pain lasting from 10-30 minutes and often longer. In this author's experience, the only real difference lies in the patients themselves since essentially the same technique can be used on either type of patient with slight modifications to make it more personally applicable.

One patient suffering continuous pain with numerous metastases throughout her body was highly resentful over her impending death, unwilling to accept narcotics because she received no relief unless made stuporous and she was most eager to spend all the time possible with her family. Her entire family had adverse religious ideas about hypnosis even though it had been recommended by her family physician, a member of her faith. Fortunately, the family was convinced by the printed words in a medical book, an article in an encyclopedia, and a personal letter to the author from a missionary of her faith telling of the successful use of hypnosis on her converts in treating them medically.

The other patient was a man in his 50's, who suffered at irregular but frequent and unexpected intervals from bouts of excruciating pain that were becoming progressively longer, ranging from ten minutes to one hour, but with short bouts becoming fewer and the long bouts becoming increasingly more frequent.

His attitude was one of scornful disbelief and mockery as well as bitter resentment at his fate and a hostile attitude toward everyone, especially the medical profession for being so "stupid about cancer."

At all events, the same general Confusion Technique except for the special references of personal implications was used.

The approach was: "You *know* and I *know* and the doctors you *know know* that there is *one answer* that you *know* that you don't want to *know* and that I *know* but don't want to *know*, that your family *knows* but doesn't want to *know*, *no* matter how much you want to say *no*, you *know* that the *no* is really a *yes*, and you wish it could be a good *yes* and so do you *know* that what you and your

family *know* is *yes*, yet you wish that *yes* could be *no* and you *know* that all the doctors *know* that what they *know* is *yes*, yet they still wish it were *no*. And just as you wish there were *no pain*, you *know* that there is *but what you don't know* is *no pain* is something *you can know*. And *no* matter what you *know*, *no pain* would be better than what you *know* and of course *what you want to know* is *no pain* and that is *what you are going to know, no pain*. (All of this is said slowly, but with utter intensity and with seemingly total disregard of any interruption of cries of pain or admonitions of "Shut up"). Esther (John, Dick, Harry or Evangeline, some family member or friend) *knows* pain and *knows no' pain* and so do you wish to *know no pain* but comfort and you *do know comfort* and *no pain* and as *comfort increases* you *know* that you *cannot say no to ease and comfort* but you *can say no pain and know no pain* but *know comfort and ease* and it is *so good to know comfort and ease and relaxation* and to *know it now and later and still longer and longer as more and more relaxation occurs and wonderment and surprise come to your mind as you begin to know a freedom and a comfort you have so greatly desired and as you feel it grow and grow you know, really know*, that *today, to-night, tomorrow, all next week and next month*, and at Esther's (John's) 16th birthday, and what a time that was, and those *wonderful feelings* that you had then seem almost as clear *as if they were today* and the *memory of every good thing* is a glorious thing—(One can improvise indefinitely but the slow, impressive utterly intense and quietly softly emphatic way in which these plays on words and the unobtrusive introduction of new ideas, old happy memories, feelings of comfort, ease and relaxation usually results in an arrest of the patient's attention, rigid fixation of his eyes, the development of physical immobility, even catalepsy and of an intense desire to understand what the author so gravely and so earnestly is saying to them that their attention is sooner or later captured completely. Then with equal care, the operator demonstrates a complete loss of fear, concern or worry about negative words by introducing them as if to explain but actually to make further helpful suggestions.)

To continue, "And now you *have forgotten* something, just we all *forget* many things, *good and bad*, especially the *bad* because the *good* are *good to remember* and you *can remember comfort and ease and relaxation and restful sleep* and now you *know that you need no pain and it is good to know no pain and good to remember, always to remember*, that in *many places, here, there, everywhere* you have been at *ease and comfortable* and now that you *know this*, you *know that no pain is needed but that you od need to know all there is to know about ease and comfort and relaxation and numbness and dissociation and the redirection of thought and mental energies and to know and know fully all that will give you freedom to know your family and all that they are doing and to enjoy unimpeded the pleasures of being with them with all the comfort and pleasure that is possible for as long as possible and this is what you are going to do.*"

Usually the patient's attention can be captured in about five minutes but one may have to continue for an hour or even longer. Also, and very important, one uses words that the patient understands. Both of the above patients were college graduates.

When such cases are referred to me, I make a practice of getting preliminary information of personality type, history, interests, education, and attitudes and then in longhand, I write out a general outline of the order and frequency with which

these special items of fact are worked into the endless flow of words delivered with such earnestness of manner.

Once the patient begins to develop a light trance, I speed the process more rapidly by jumping steps, yet retaining my right to mention pain so that the patient knows that I do not fear to name it and that I am utterly confident that he will lose it because of my ease and freedom in naming it, usually in a context negating pain in favor of absence or diminution or transformation of pain.

Then one should bear in mind that these patients are highly motivated, that their disinterest, antagonism, belligerence, and disbelief are actually allies in bringing about the eventual results, nor does this author ever hesitate to utilize what is offered. The angry belligerent man can strike a blow that hurts his hand and not notice it, the disbeliever closes his mind to exclude a boring dissertation but that excludes the pain too and from this there develops unwittingly in the patient a different state of inner orientation, highly conducive to hypnosis and receptive to any suggestion that meets his needs. And sensibly, one always inserts the suggestion that if ever pain should come back enough to need medication, the relief from one or two tablets of aspirin will be sufficient. "And if any real emergency ever develops a hypo will work with far greater success than ever." Sometimes sterile water will suffice.

All of the foregoing indicates that the Confusion Technique is a prolonged, highly complicated and complex procedure. Working one out and explaining the rationale of the procedure is indeed a long hard task, but once one has done that more than once, and has learned to recognize the fundamental processes involved, there can then be a very easy comfortable and rapid trance induction under some most unfavorable conditions. To illustrate this, both a spontaneous experimental instance and a clinical case will be reported. The first of these occurred at a lecture before a medical society. One of the physicians present was most interested in learning hypnosis, listened attentively during the lecture, but in the social hour preceding the lecture, he had repeatedly manifested hostile aggressive behavior toward most of his colleagues. When introduced to the author, he shook hands with a bone-crushing grip, almost jerked the author off his balance (the man was at least 6 inches taller than the author and about 65 lbs. heavier) and aggressively declared without any preamble that he would like to "see any damn fool try to hypnotize me."

When volunteers for a demonstration were requested, he came striding up and in a booming voice announced, "Well, I'm going to show everybody that you can't hypnotize me." As the man stepped up on the platform, the author slowly arose from his chair as if to greet him with a handshake. As the volunteer stretched forth his hand prepared to give the author another bone-crushing handshake, the author bent over and tied his own shoe strings slowly, elaborately and left the man standing helplessly with his arm outstretched. Bewildered, confused, completely taken aback at the author's nonpertinent behavior, at a total loss for something to do, the man was completely vulnerable to the first comprehensible communication *fitting to the situation* that was offered to him. As the second shoe string was being tied, the author said, "Just take a deep breath, sit down in that chair, close your eyes, and go deeply into a trance." After a brief casual startled reaction, my subject said, "Well I'll be damned! But how? Now do it again so I can know how you are doing it."

He was offered a choice of several traditional techniques. He chose the hand-levitation method as seeming the more interesting, and this technique was employed slowly both for his benefit and that of the audience, with another somnambulistic trance resulting.

As an experimental subject in that situation, he presented in an excellent manner the problem of adequately meeting his behavioral patterns and eliciting responsive behavior of interest primarily to the audience although he too was interested secondarily but his primary interest as a person was one diametrically opposed. He wished to elicit responses of futility from the author, but even this was a tacit acknowledgment of hypnosis as a valid phenomenon.

The explanation of what happened is rather simple. The man came up to the podium with an intense determination to do something. The author's rising as if to greet him with a handshake and then bending over to tie his shoe strings left the man standing with an outstretched hand, unable to do anything, interrupted so suddenly in the initiation of what he was going to do, too astonished by the author's completely nonpertinent behavior, utterly at a loss for something to do, and hence, completely susceptible to any clearly comprehensible suggestion of what to do fitting to the total situation that he responded relievedly to the simple quiet instruction the author offered. And of course, the man's underlying attitude toward hypnosis became manifest in his prompt request made upon his discovery of what had happened.

Similarly, many clinical patients show comparable behavior of hostility, aggression and resistance, yet they are earnestly seeking therapy. The Confusion Technique alters the situation from a contest between two people and transforms it into a therapeutic situation in which there is joint cooperation and participation in the mutual task centering properly about the patient's welfare and not about a contest between individuals, an item clinically to be avoided in favor of the therapeutic goal.

To illustrate with a similarly handled clinical instance, a patient entered the office for her first appointment with a hesitant uncertain manner but with what seemed to be too forceful and too defiant a stride. She sat down in the chair in a stiff upright fashion with her arms rigidly holding the palms of her hands braced against her knees and in a weak voice hesitantly explained, "I was sent to you by Dr. X who worked hours on me. Before him was Dr. Y who also worked hours on me. And before him was Dr. Z and he worked 30 hours on me. All of them told me that I was too resistant to be hypnotized but they all said you could do it. But I went to the other two because they were near my home town. I didn't want to come all the way to Phoenix to be hypnotized but even my family doctor has told me it would help overcome my resistances to therapy." Her diffident, uncertain, hesitant bearing and voice, her definite stride, her stiff upright position, her overemphasis upon the hours futilely spent already in trying to induce a trance, her regretful statement that she didn't want to come to Phoenix to be hypnotized and her insistence on going to two other men when the first as well as both the others had recommended the author suggested: (1) That she would resist hypnosis, (2) that she was bewildered by her ambivalences; (3) that she could not be approached by any ordinary expectable technique of induction; (4) that she definitely wanted therapy; and (5) that she would try to embroil the author in a contest instead of accepting therapy.

Accordingly she was told rather brusquely, "Well let's get this clear. Three doctors, all good men, just as good as I am, have worked hard and long on you. They found you to be too resistant, *as I will too. So let's have that understood at once.* With markedly differing inflections and tempo, the following was said to her as a two-part statement, "*I CAN'T HYPNOTIZE YOU, just your arm.*"

In a bewildered fashion she said, "Can't hypnotize me, just my arm—I don't understand what you mean."

Again she was told with heavy emphasis with the words spoken slowly, "*THAT'S EXACTLY WHAT I MEAN. I CAN'T HYPNOTIZE YOU;*" then with a soft gentle voice I added rapidly as if it were one word, "*just your arm, see.*"

As I said the word "See", I gently "lifted" her left arm upward, the touch of my fingers serving only to direct the upward movement, *not actually to lift it.* Gently I withdrew my fingers, leaving her hand cataleptically in midair. As she watched her arm in its upward course, I said softly and sighingly, "Just close your eyes, take a deep breath, go deeply asleep and as you do so, your left hand will slowly come to rest on your thigh and remain there continuously as you sleep deeply and comfortably until I tell you to awaken."

Within five minutes after her entrance into the office, she was in a deep, and as it proved to be, somnambulistic trance. What happened? The woman was desperately seeking therapy, had come a long distance to seek it in response to repeated advice; she came with a rigid counter-set for any conventional traditional ritualistic or other techniques that she could watch, hear and understand. Believingly, agreeingly, she heard me say clearly and understandably, "I can't hypnotize you" to which was appended softly, quickly, and gently while she was still in a believing or accepting frame of mind, the inexplicable three words, "*just your arm.*"

Thus the very thing that she had come to prove was already affirmed, it was a closed issue. We were in total agreement, her purpose to prove that she could not be hypnotized was already accomplished, her counter-set for hypnosis rendered unnecessary, useless. But those three peculiar words, "*just your arm*" confronted her with a most bewildering question of what was meant. Thereby she was literally forced to ask for some explanation. The reaffirmation was given with deliberate emphasis and while her mind was still receptive, four more words were quickly added, the fourth a command, "See!" From earliest childhood, we learn to interpret certain tactile stimuli as meaning, "*Move*" and *she made an automatic response to such a tactile stimulation.* This she could not understand, she had no counter-set for it, and she could "see" her arm behaving in a way she could not understand. Nor was she given any opportunity. The elicitation of one hypnotic response leads so easily to another, catalepsy, pupillary dilation, and then an all comprehensive set of suggestions was given to insure a deep trance and its maintenance.

Hypnotherapy and waking psychotherapy were used on this patient and the progress was phenomenally rapid for the simple reason that she was not allowed to interpose her resistances between herself and therapy, but put into a situation of objectively examining them. This was begun almost immediately with the statement, "Well now we can proceed with therapy rather than wasting time on a question for which neither you nor I really knew the answer, but to which you have so easily found the correct answer, namely that *you can develop and keep a deep trance state* and that you don't need resistances."

SUMMARY

WITH THE FOREGOING DISCUSSION and examples in mind, it might be well to summarize the Confusion Technique as a play on words or communications of some sort that introduces progressively an element of confusion into the question of what is meant, thereby leading to an inhibition of responses called for but not allowed to be manifested and hence to an accumulating need to respond. It is reminiscent of the childhood word games such as "If it isn't *not raining* than it *is raining*," or, "I am *here* and you are *not here* and New York is *not here*, so you must be in New York because you are *there, not here*, and New York is *there, not here*."

Starting with these elementary ideas, the author has added to the play on words the modification of seemingly contradictory, or irrelevant unrelated concepts, non sequiturs and ideas, variously communicated, and each of which *out of context* is a simple reasonable assertion, meaningful and complete in itself. *In context*, such communications given in a meaningfully emphatic manner become a medley of seemingly valid and somehow related ideas that leads the subject to try to combine them into a single totality of significance conducive to a response, literally compelling a response. But the rapidity of the communications inhibits any true understanding, thereby precluding responses and resulting in a state of confusion and frustration. This compels a need for some clear and understandable idea. As this state develops, one offers a clearly definite easily comprehensible idea which is seized upon immediately and serves to arouse certain associations in the subject's mind. The medley is then continued and another comprehensible idea is offered, enhancing the associations of the previous clear understanding. And in the process, one throws in irrelevancies and non sequiturs as if of pertinent value, thereby enhancing the confusion. This sort of thing constitutes, in certain situations, a form of humor such as in the case of the childish riddle of "Two ducks in front of a duck, two ducks behind a duck, and one duck in the middle. How many ducks are there?" Even those of my playmates on whom I tried this and who knew the answer to be three ducks would find themselves hopelessly bewildered when I would add with earnest helpfulness, "Of course, you must remember they were beside the *left hand door*." And for those who did not know the answer and who were struggling with the *two and two and one*, the *left hand door* often constituted an insuperable barrier to a responsive reply as a result of a natural tendency to fit that irrelevancy into the problem.

However, a Confusion Technique is sometimes most difficult for some users of hypnosis and they find much difficulty in attempting it for either experimental or clinical work. Nevertheless, it does have significant values for those who cannot use it in a hypnotic setting since repeated efforts to devise and deliver a Confusion Technique for the sake of practice only will soon teach the user of more conventionalized ritualistic traditional verbalized techniques a greater fluency in speech, a freedom from rote suggestions, a better understanding of the meaning of suggestions, and a greater ease in shifting one's own patterns of behavior in response to observed changes in the patient, and in shifting from one set of ideas to another. Repeated experience in teaching hypnosis to medical and psychological students and residents in psychiatry, the assignment of the task of devising and analyzing a Confusion Technique aided them greatly in learning traditional verbalization

techniques, even those who never could seem to learn to use a Confusion Technique spontaneously or intentionally in a hypnotic situation.

Thus, the Confusion Technique is a presentation of ideas and understandings conducive of mental activity and response but so intermingled with seemingly related valid but actually nonpertinent communications that responses are inhibited, frustration and uncertainty of mind engendered and the culmination is then in a final suggestion permitting a ready and easy response satisfying to the subject and validated by the subject's own, though perhaps unrecognized by the self, experimental learnings.

SECTION II

Experimentation with Hypnosis

The Investigation of a Specific Amnesia*

SPECIFIC AMNESIAS are an everyday occurrence. Their study and analysis offer a wide field of therapeutic and theoretical interest through the understanding they afford of the mechanisms of repression and the means of removing, overcoming, or circumventing repressive forces. Psychoanalysts have written much on the subject, particularly in regard to the role of affect and the utilization of free-association techniques in the recovery of the forgotten word or name or whatever the amnesia may be. Recently, the problem of a specific amnesia was presented to the author for investigation and recovery of the forgotten material. In achieving the desired results, use was made of the various psychological techniques of free association, hypnosis, automatic writing, crystal-gazing, and dream activity. The complexity of psychological phenomena, the successful use of disguise mechanisms, the apparent, though perhaps artificial sublevels of consciousness, and the peculiar behaviour of the affect encountered, all invite speculation and give rise to problems for investigation.

The subject in this experiment was a young girl studying for her doctorate in psychology. She came to the author in October, stating that, on the previous Christmas, she had presented a gift to a young man in whom she was much interested. The identity of this gift she had forgotten, possibly because she had later considered it not entirely suitable. She refused to give any additional information, insisting that only the nature of the forgotten object interested her, and she suggested that the very scantiness of information given be considered a part of the experimental situation.

For two weeks previously, she had been trying unsuccessfully to recall the forgotten material. She was advised to continue for another week, which she did without success, reaching the conclusion that she would have to write a letter of inquiry to her friend. The significance of this conclusion will become apparent later. Having failed in her efforts, she now wished the author to take charge of the problem.

Free association was the first technique employed; but her conscious unwillingness to reveal anything of a personal nature rendered this means futile. Accordingly, it was discarded in favor of hypnotism, since she had been trained previously for experimental hypnotic work. In the use of this technique, the subject was hypnotized and awakened repeatedly throughout the course of the investigation in accordance with the needs of the immediate situation. All trances were of the profound, somnambulistic type characterized by dissociation and an apparently complete amnesia for trance suggestions and experiences.

In the first trance, she was asked to give free associations. She did this readily,

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producing many nonidentifying associations, but she persisted in her waking refusal to give additional pertinent information. When asked in the trance state to name the gift directly, she manifested strong emotional tension and declared that she was unable to do so, that it had been forgotten completely. Since apparently no progress could be made by this method, she was given post-hypnotic suggestions to the effect that, when she awakened, she would talk freely in generalities about the gift and suddenly name it. This succeeded in all but the naming of the object. The attempt was repeated in a second induced trance state, with the additional suggestion that she would interrupt her general remarks to declare impulsively, "It was a (name)." These instructions were obeyed to the crucial point, when she became emotional, seemed surprised, and complained of sudden mental blankness. Questioning revealed that she did not even have the feeling of "something on the tip of her tongue."

A third trance state was induced in which she was given post-hypnotic suggestions to perform automatic writing upon awakening. In her writing, she was to give various descriptive details and finally the identity of the gift. Meanwhile, she was to engage the author in an animated conversation as a means of absorbing her attention away from her writing. However, nothing definitely descriptive was written, and when it came to the point of writing the name of the gift, her hand moved more and more slowly while she twisted and squirmed in the chair, complained of feeling tired, and protested about the hopelessness of the experiment. When the probable nature of the complaints and protests was mentioned, she showed good insight but declared herself to be unable to control her emotions. She was shown her automatic writing, of which she had been unaware. She exhibited surprise, then eagerness expressed in the inquiry, "Did I write the name?" and finally disappointment when she noted her failure. The procedure was repeated, using more forceful suggestions, but with no better results.

A slight variation was made in the technique. Post-hypnotic suggestions were given to the subject to write automatically and in mixed order the letters contained in the name of the object. An excessive number of consonants was obtained. The procedure was repeated, with instructions to write automatically the letters of the alphabet, underlining those which were significant. As before, an excess of consonants resulted. In both attempts, marked affective disturbance was noted, but the particular letters could not be determined. When shown her production the subject exhibited, as before, surprise, eagerness, and disappointment.

These failures indicated a need for a still further change of technique. While in a state of profound hypnotic sleep, the subject was given the suggestion that she could reveal indirectly the information desired with neither "conscious" nor "subconscious" realization of what she was doing. To this end she was instructed to continue in a state of deep hypnosis, thereby "dissociating" her "conscious mind" and leaving it in a state of quiescence. At the same time, by means of her "subconscious" mind, she was to engage the author in an animated conversation. Thus, with both "conscious" and "subconscious" minds engaged, a "third level of consciousness" in response to hypnotic suggestion would "emerge from the depths of her mind" and would express itself by guiding her hand in automatic writing, of which she would be aware neither consciously nor subconsciously.* On the first trial, in

*The author assumes no responsibility for the validity of these concepts and the trance state of the subject probably accounts for her acceptance of them, but at all events, they served the purpose.

accordance with this instruction, she wrote vaguely descriptive material concerning the gift. Further suggestion was given to the effect that the "third level of consciousness" could now write the significant information, but in such disguised fashion that its true meaning would not be apparent. The sentence illustrated in FIG. 1 was obtained. As she wrote the word "box," she became emotionally disturbed and

*The
box on the table.*

FIG. 1

complained of feeling tired, uncomfortable, and "funny," but this behavior disappeared as she completed the sentence. She was shown the sentence in both the trance and waking states, but denied seeing any pertinent meaning in it and declared that it was not her handwriting, substantiating her contention by writing the same sentence in her normal waking state, as illustrated in FIG. 2. Another

The box on the table.

FIG. 2

trance was induced and the same instructions were given to her with the addition that the word "box" would influence her hand to write the exact identity of the gift, but in such guise as to lead both herself and the author astray. Obeying these instructions while conversing vivaciously in a deep trance state, her hand automatically wrote in a hesitant fashion the sentence illustrated in FIG. 3. As she

*The
painted request box on the
library table.*

FIG. 3

wrote the second, third, and fourth words she exhibited much emotion, sighed, flushed, squirmed, and complained of feeling "funny." She also expressed a skepticism toward whatever the author was trying to do, declaring that he must be trying to make her do something—what it was she did not know, but she did know that she could not do it.* When shown what she had written, she read it listlessly, declaring that it had no meaning for her and insisting that it was not her handwriting. Awakened, she likewise disowned the writing but she read the sentence with great interest and recalled for the first time that she had contemplated giving a cigarette case but had changed her mind. All associations became blocked at this point and she was insistent that the experiment be discontinued as hopeless. However, her insight into the whole situation soon rendered her attitude more favorable.

Because of the subject's affective state, another change in technique was made by asking her to attempt crystal-gazing. In the crystal she saw herself walking down the street, entering a jewelry store in which she inspected cigarette cases, and then continuing down the street and entering a department store, whereupon she immediately lost sight of herself in the crowd. She saw herself next leaving the store with a small package under her arm which she took to her room and placed in a

*The subject appeared to have a rather limited understanding of the whole situation when in the trance state.

bureau drawer. In response to further suggestions, she watched herself prepare the gift for mailing, but each time that she was about to catch sight of the gift, her crystal image would turn in such fashion as to occlude her line of vision. All suggestions to the contrary were without effect other than that she was able to give the rough dimensions of the article, which had not been possible previously. Further variations of the crystal-gazing were without results. Finally, she was rehypnotized deeply and given post-hypnotic suggestions to the effect that she would dream that night about the gift but would not verbally identify it in her dream. The next morning, however, she could recall the dream and in so doing would recall the name of the gift.

Early the next day, with a complete amnesia for the post-hypnotic suggestions, she related that she had awakened during the night in the midst of a dream about the forgotten article. She had recounted this dream to herself on the possibility that the author might be interested. In the morning, however, she recalled dreaming but not the dream content. Instead she suddenly recalled having a letter in her strong-box thanking her for the present, and she felt herself forcibly impelled to read the letter. She did this, and discovered that the object was a box of paints. She was shown the automatic writing illustrated above, and she exclaimed, "How different it looks now!"

The discovery of the identity of the gift did not end the problem, but gave rise to new and interesting aspects. A week later, the subject complained that she was unable to recall her dream and that she felt a strong desire to know what it was. She asked that hypnosis be utilized in the securing of this second lost memory. Much the same procedure was followed in this regard as had been used in attempting to recover the nature of the gift. All attempts, however, were failures until she was given suggestions disorienting her temporally. When these suggestions had been accepted, she was told that it was the night of the dream and that she was actually in the midst of her dream. As she relived the dream, she was instructed to give an account of it to the author, and thus a verbatim report was obtained. The dream was: "There was a group of people in a place. It takes place in a hospital—hospital people. I'm telling them about the procedure, telling them about the results, telling them we got the name of the gift, but I don't tell them what the gift was." She was awakened with instructions to remember the dream. This she did, and expressed her pleasure, until suddenly she declared in great surprise, "I've forgotten the name of the gift now." She was urged to try to recall the gift, but after much effort and numerous attempts at free association, she failed. She repeated the dream content in an effort to reawaken her associations, but even this failed. A trance state was induced and she was told to recall the name of the gift after awakening. When aroused from the trance she promptly declared, "Why, I remember it now. It's a box of paints." After a general conversation, she was casually questioned about her dream content, and to her profound amazement, she discovered that again she had forgotten the dream completely. Repeated investigations disclosed that she could not keep the identity of the gift and the dream content in her mind simultaneously. Finally, in the waking state, in which she could recall the name of the gift, she was casually informed of the dream content. Following this, she was able to remember both.

Four days later, she complained to the author that she had been trying daily to write a letter to her friend in accordance with her regular custom, but that she

could not do so. She had forced herself repeatedly to sit at her desk and begin the letter, but found herself unable to write more than a line or two before her thought processes became blocked and she felt emotionally disturbed and compelled to do something else. She was given the plausible explanation that the affect originally causing the repression had not been dissipated but had subsequently attached itself to the dream content, later to the identity of the gift, and finally, when both of these repressions had been circumvented, the affect had attached itself to the idea of a letter to her friend. After listening to this explanation, the subject declared, "I understand it now. Now I can write my letter."

Contact was maintained with the subject following this experience, but no unusual occurrence came either to her or the author's attention.

Because of the clinical interest aroused, attention may be called here to a consideration of the automatic writing. The word "box" was markedly displaced in the first sentence, which is suggestive of some unrecognized purpose. A similar displacement of the significant words in the second sentence enhances the possibility that this measure is a purposeful though unconscious means of self-betrayal. This conclusion is substantiated further by noting the relatively smaller size of the letters "e" and "d" in the word "painted." The scrawling of the word "cigarette" appears superficially to be a clever method of distracting attention, but the account of the motivation suggests a deep and significant symbolism for it as well as for the other two words.

The peculiar behavior of the affect at the termination of the experiment resulting in the alternate repression of the identity of the gift and of the dream content, with subsequent attachment to the related concept of the letter, suggests a strong conflict and an unwillingness or an unreadiness to accept the symbolic significance of the ideas concerned.

Not until after the above report had been drafted into its final form for publication and submitted to the experimental subject for criticism was it possible to secure an account of the motivations for her repression. Fortunately, she had kept a daily journal of her thoughts during the entire time of the amnesia, and from this and her elaborations of this journal, the motivations were obtained. Minor and incidental points as well as elaborations of the symbolism are omitted for personal reasons.

For five years, the subject S. had been in love with M., a man belonging to another race and culture, artistic in nature and extremely idealistic, puritanical, and conventional in attitude. She had planned to marry him at the expiration of another year. Her own philosophy of life at the time was very similar to his. In the month of September preceding the amnesia, she met C., a man of her own race and culture and whose personal philosophy was the antithesis of M.'s. A warm friendship rapidly developed between S. and C., with the consequence that she felt strongly inclined to relinquish her former teachings and ideals and to accept C.'s broader and freer ideals of life. Yet to do so would be essentially a negation of what she had considered to be the finer principles of personal life and a destruction of her worthiness in the eyes of M., whom she loved. As she considered this problem, she realized that any independence for herself could evolve only from a deliberate choice on her part between these opposing personal philosophies. Yet she dared not choose C., although critical thinking suggested such a choice, because to do so would be to overthrow the conventional and idealistic precepts of her past teaching.

To choose M. would mean the hampering of her intellectual and emotional nature. She hoped that something would happen which would force her to recognize her fundamental inclinations, because she knew that she lacked the courage to face the decision deliberately. It was then that the amnesia developed as one of the indications of her conflict: At first, she considered the amnesia inconsequential, but soon she began to feel that it symbolized her choice and she felt a compulsive need of discovering the nature of this amnesia in order to know its meaning, and yet she feared to know its meaning. Upon the recovery of the memory, she immediately understood the rationale for the selection of the forgotten object. In purchasing the Christmas gift, she had first inspected cigarette cases, thereby establishing an associative value. C. possessed a beautiful antique painted box which he used as a cigarette container. The one man, artistic and idealistic, was easily symbolized by the box of paints, while the other man possessed a painted box of practical personal use. With the recovery of the forgotten identity, she sensed its import but dared not recognize it. To rob it of its meaning, a second problem had to be created, namely, the amnesia of the dream. When this problem was solved she still had the fundamental question to face, but could not do it, and so a second amnesia of the gift occurred. When finally forced to remember both the dream and the gift, she realized that she had made her choice and sat down to write a letter to M., thereby formulating her ideas and definitely committing herself. However, she could not do this until, with the aid of the author, she forced herself to recognize the affective features of the whole situation.

In summary, the problem investigated was an attempt to recover the content of a specific amnesia of the identity of a Christmas gift without the aid of supplementary information. Techniques of free association alone, free association and direct questioning in hypnosis, automatic writing, and crystal-gazing were tried without success. Finally, by means of a specious argument concerning the existence of a third level of consciousness and the permission to use disguise mechanisms, the forgotten material was actually obtained, but in such guise that its true significance was not recognized. Then by means of dream activity, a situation was created whereby the subject, without assuming the responsibility, could circumvent the repression. Following this, a conflict state developed, characterized by the alternate repression of two ideas, and ultimately resolved by the attachment of the affect to a related subject, from which it was eventually dispelled. The motivation of the amnesia was not learned until months later, when the subject disclosed its origin to lie in an emotional conflict concerning two men.

A Study of Clinical and Experimental Findings on Hypnotic Deafness

I. Clinical Experimentation and Findings*

THE INDUCTION of a state of apparent deafness in a normal hypnotic subject constitutes a familiar but little tested psychological phenomenon. Significant questions centering about this manifestation concern its comparability with organic deafness and the nature of the processes entering into its production, whether as an actual or only as an apparent condition, together with the systematic problems that arise in distinguishing between "apparent" and "actual." To investigate these questions, extensive clinical studies were conducted over a period of years on normal hypnotic subjects, and these were followed by an experimental study to be reported in Section II of this paper. The clinical investigations were directed chiefly to the question of the validity of the phenomenon, utilizing for this purpose various clinical testes and measures of hearing, and, particularly, careful observation of the subjects' behavior. Emphasis was placed upon the latter since it was felt that the clinical behavior and the subjective reactions might prove suggestive of various psychological processes and forces entering into the condition.

SELECTION AND TRAINING OF SUBJECTS

THIRTY SUBJECTS were carefully selected out of a sample of over 100 normal college students of both sexes as especially capable of developing a profound stuporous trance and these were then employed for this study.

The rationale for such a high degree of selection was this: Past experience had repeatedly demonstrated that a deep trance characterized by catalepsy, automatism, hypersuggestibility and profound amnesia often permits the subject to retain a definite capacity to react in a spontaneous volitional manner apart from the demands of the hypnotic situation and in keeping with waking patterns of behavior. In such trance states, behavior may actually consist of a mixture of responses to the immediate hypnotic situation and responses deriving from ordinary waking behavior. Since the contemplated experimental work necessitated the negation of ingrained patterns of normal response and behavior, and because the study was concerned with the character of the manifestations rather than with the frequency with which they could be induced, it was considered essential to secure subjects capable of responding fully and completely to the difficult hypnotic suggestions to be given. Such subjects would be those whose responses could be limited to the immediate stimuli of the hypnotic situation uninfluenced by their usual associative and habitual modes of reaction, and who would not feel a need to continue in contact in some way with waking reality, thus eliminating sources of error arising from faulty, incomplete or superficial trances.

The actual details of the technique employed are too extensive and laborious to

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be reported in full. Essentially, the procedure consisted of the induction of a deep trance, followed by a deep hypnotic stupor and succeeded in turn by a profound somnambulistic state. On the average, two hours were spent in slowly, systematically giving graduated suggestions to each susceptible subject before he was considered to have reached a sufficiently stuporous state, which resembled closely a profound catatonic stupor.

The next step in training was the teaching of the subjects to become somnambulistic without lessening the degree of their hypnosis. Ordinarily, the procedure with a deeply hypnotized subject is to suggest that he open his eyes and act as if he were awake. Long experience on the part of the experimenter and his colleagues has shown that in somnambulistic states thus crudely suggested, critical observation can detect a definite mixture of normal waking and hypnotic behavior leading to unsatisfactory findings and to a more or less ready disorganization of the somnambulism as a state in itself.

To avoid such difficulties and uncertainties, a special technique of suggestion was devised by which the subject in the stuporous trance could slowly and gradually adjust himself to the demands of the somnambulistic trance. Usually an hour or more was spent in systematic suggestion, building up the somnambulistic state so that all behavior manifested was in response to the immediate hypnotic situation with no need on the part of the subject to bring into the situation his usual responses to a normal waking situation. This training was directed to a complete inhibition of all spontaneous activity while giving entire freedom for all responsive activity. The final step in the preliminary training was the repetition of the entire process over and over again at irregular intervals during a period of a week or more until it was possible to secure the stuporous trance and the somnambulistic state within 10 minutes.

When this preliminary training had been satisfactorily completed, measures were taken to prepare the subject for the investigative work, concerning which he had been kept entirely in ignorance. The steps in this procedure were:

1. A clear concise emphatic statement that it was proposed "to hypnotize" him into a "state of absolute deafness."
2. The statement that, as this was done, hypnotic suggestions would be given which would cause slight difficulty, and then more and more difficulty in hearing until finally all sounds, including the hypnotist's voice, "would fade into nothingness."
3. The statement that, as all sounds faded away, he would receive a sharp slap on the shoulder which would cause "the utter silence of absolute deafness," and that *ever afterwards whenever he was in a deep trance*, merely a blow on the shoulder would produce "instant and absolute deafness."
4. The statement that the deafness would persist *unchanged and complete* until his right wrist was squeezed, or until he was informed definitely in some way to recover his hearing, whereupon his hearing would return "instantly and completely."
5. The induction of a state of amnesia for all commands and instructions, the amnesia to be present continuously for all future trance, post-hypnotic and waking states.

These instructions were given slowly, emphatically and impressively, and were repeated many times to insure full comprehension and acceptance.

Upon the completion of this preparation, the following series of suggestions were given slowly, repetitously and insistently, progressing gradually from one type to the next as the subject seemed to accept them:

1. Realization that deafness *could* be achieved.
2. That it *would* be achieved.

3. That it was an absolute reality of the *future*.
4. That it was an *impending actuality* of the moment.
5. That the subject was now *preparing to become* totally deaf.
6. That he was *now prepared* and ready.
7. That he was now *awaiting the total deafness* to ensue upon suggestion.
8. That he was now *getting deaf*, that sounds were *fading out*, that the silence was *getting deeper*, that it was *harder and harder* to hear, that he *felt himself growing more and more deaf*.
9. Finally, he was given a rapid series of loud, emphatic, and absolute instructions to become deaf, totally deaf, with the experimenter's voice gradually fading out as these instructions were concluded.

The cessation of the verbal suggestions culminated in the pre-arranged physical stimulus. A few moments of rest were allowed. Then, as a reinforcement, pressure was applied to the shoulder, at first gently and then with increasing force, until the subject's facial expression indicated discomfort, whereupon the pressure was slowly released. After a few moments, some simple clinical tests were made, followed by restoration of hearing in accordance with the established physical stimulus. After another short rest, repetitions were made of the whole procedure, gradually decreasing the verbal aspects until the physical stimulus alone proved sufficient. The time required to induce the first deaf state ranged from 20-40 minutes, an interval indicated by previous experience with other hypnotic subjects as requisite to achieve the "mental set" permitting a consistent reliable state of deafness to develop.

CLINICAL FINDINGS

THE CLINICAL FINDINGS made were obtained by direct observation of the subject's behavior by the experimenter and his assistants, subjective reports obtained either at the time or subsequently by written or oral inquiry depending upon the subject's state of hearing, and the execution of various procedures by the subject.

General Hypnotic Responses

Although the 30 subjects selected were capable of developing the usual deep hypnotic trance characterized by the phenomena cited above, approximately one-third, to be referred to as Group *A*, failed to develop the stuporous trance. A second third, Group *B*, went into the stuporous state but failed to develop the desired profound somnambulistic state. The remainder, Group *C*, developed both the stupor and the profound somnambulistic states, and it is of significance that these were the subjects who showed the more marked changes in the experimental situation. However, Groups *A* and *B*, who manifested the lesser degree of auditory impairment did develop somnambulistic states of more superficial character usually employed in hypnotic work. Regardless of the apparent depth of the trances, the entire battery of hearing tests was administered to all subjects whenever possible. Of the total of 30 subjects, 10 were eliminated entirely by the tests as showing no form of deafness, 6 were found to be apparently totally deaf, and 14 showed various degrees of impairment of hearing.

Impairment of Auditory Functioning

Fluctuation of Auditory Threshold. This type of reaction was found consistently

among the subjects in Groups *A* and *B* and also, to a much less extent, in Group *C*. The typical fluctuation of the auditory threshold resulting in progressive increase in deafness was as follows: Certain subjects claimed to be able to hear all sounds but explained that the sounds were changed in character by being faint and distant. During conversation, they seemed to experience a considerable degree of difficulty in distinguishing words spoken in a normal tone of voice. This difficulty could be lessened by raising the voice. Soon this raising of the voice would prove to be insufficient, and they would explain that the experimenter again seemed to be "mumbling," although his voice had been maintained at a constant level. Elevating the voice still more would again enable the subject to hear more clearly. Each time this was done, as the conversation was prolonged, the subject would experience increasing difficulty in hearing clearly, and he would explain that the experimenter's voice was slowly becoming a mere "mumble." Furthermore, it was discovered that a conversation conducted in a tone of voice sufficiently loud to be audible to the subject, if interrupted for a minute or two and then resumed in the same loud tone of voice, would be described by the subject as indistinct "mumbling." Also, it was learned that the "faint sounds" reported heard at the onset of the deafness tended to drop out as the subject became increasingly deaf to the experimenter's voice, and a subjective report of "complete silence" could be obtained.

To investigate further, the subject was blindfolded so that he could not watch lip movements. A long series of remarks was made to him in an increasingly loud tone of voice. Suddenly, the remarks were interrupted and silence was maintained for a minute or two following which the remarks were continued in the same loud tone. However, a period of one to two minutes would elapse before the subject became aware of the resumption of the speech, which he would describe then as a "mumbling." Also, while still blindfolded, if a series of remarks were addressed to him in an increasingly loud tone of voice and then the voice was suddenly dropped to a normal level without interruption of speech, the subject would remain unaware of the continuance of the remarks until after one to two minutes. Then again he would begin to hear vaguely and indistinctly and inquiry would disclose his assumption that the experimenter had remained silent for a while. Continued investigation disclosed that this indistinct hearing would persist about a half minute and would then fade out. After another one to two minutes of continued speech, he would again hear indistinctly for a brief interval, and this manifestation, highly suggestive of a process of summation of stimuli, could be continued indefinitely.

Progressive Decrease in Deafness. Certain other subjects manifested an opposite reaction. They would disclaim any ability to hear and their general behavior confirmed this contention. Nevertheless, if a series of remarks were addressed to them, they would, after about a minute's delay, gradually begin to hear faintly and then more and more distinctly until the experimenter's normal tone of voice became fully audible to them.

Cessation of speech for a minute or two followed by a resumption would again meet with complete deafness which would slowly decrease in degree after a minute or two until the subject could again hear plainly. Continued repetition of the process slowly reduced the period of apparently complete deafness to about 30 seconds and increased the rate of complete restoration of hearing. Similarly, a longer period of silence would delay the beginning of and prolong the period of

restoration of hearing. Blindfolding seemed to delay markedly the gradual decrease in deafness, in one subject for a period of five minutes consistently, but in no instance did the deprivation of visual cues prevent the process.

For both groups, the investigation was continuing with a variety of sounds, including electric buzzers, bells, tuning forks, and alarm clocks, as well as the voice of an assistant, with essentially the same results.

An interesting clinical difference between these two groups was their subjective reactions to their auditory difficulties. Those showing primarily progressive increase of deafness tended to ascribe their difficulty to themselves, explaining that the experimenter "seemed to be mumbling," that sounds "seemed to be faint and distant" and that their ears seemed "stopped up" as from a cold or from "getting water in them from swimming," and they would strain to hear, shake their heads and finger their ears. Those showing primarily a progressive decrease tended, on the other hand, to project their difficulties on the experimenter, explaining their difficulty by complaining that he was speaking inaudibly at first and then gradually raising his voice to an audible level. When questioned about other sounds, the explanation was offered that the experimenter was utilizing an electric control over the intensity of the sounds. No effort was made to correct their views since only their spontaneous reactions were considered significant.

Impairment of Spatial Localization and Time Relationships. In all of the subjects showing impairment of hearing, there was found to be a marked decrease in the ability to locate sounds spatially and to determine time relationships. Since the findings were essentially the same for all of the subjects, they may be illustrated by the following specific account. One subject, who declared his ability to hear all sounds faintly, was urged to listen carefully and to identify the next noise he heard. The sound employed was that of a concealed alarm clock with an intermittent alarm which rang for one-minute periods at five-minute intervals. Not until some time after the alarm began ringing did he seem to hear it, whereupon he began listening in a strained fashion, first in one direction and then in another, while his eyes searched the floor, the walls, and the ceiling in his endeavor to locate the sound. This behavior continued for a full minute after the alarm ceased to ring. Then, after a sudden start, he listened intently and declared that the sound had ceased. Immediate questioning by paper and pencil concerning the character of the sound elicited the answer, "*I couldn't tell. It was just a faint noise.*" There followed the spontaneous observation, "*And what's more, I can't even tell you where it came from.*" The suggestion was offered that he "might like to find out what it is," and when the alarm rang again, he suddenly declared, after a delay of some 30 seconds, "*I hear it*" and began to wander about the room in a vague, confused uncertain fashion, listening intently in an effort to locate the sound. It was noted that he continued his search for about a minute after the alarm had become silent, whereupon he declared, "*It's stopped again,*" nor did he show any apparent realization that his time relationships were wrong. Repeated attempts were made before he succeeded in locating the place of concealment of the clock. Subsequently, the clock was secretly removed to a diagonally opposite corner of the room. It was noted that he continued to listen in the direction of the former location and failed to detect the altered direction of the sound even when he approached the supposed place of concealment to listen more closely.

This was followed by the use of two clocks adjusted to ring in immediate suc-

cession, the one ringing first located in the original place of concealment and the second in another corner of the room. The subject was instructed again to find out what the sound was. As previously, after a delay of about 30 seconds, he heard the sound, located it correctly but uncertainly, and failed completely to note any change in location when the second clock sounded. Later, the clocks were shifted to various locations, but the first localization achieved in each instance sufficed for the other sound.

Another variation consisted in adjusting the clocks so that the second alarm would follow the first at selected intervals. Since the subject tended to hear subjectively from 30-60 seconds after the sound had ceased, it was found that an interval between the alarms greater than this lag was necessary to permit the subject to realize that the sound had ceased and then had begun again. Also, there was found to be no time lag in the detection of the second sound if it occurred within the "perseveration" period of the first sound. Otherwise, a time lag marked the detection of a second sound. Various types of sounds were employed, the subject was blindfolded, definite instructions were given to localize sounds, but essentially the same results were obtained. Even the pairing of an electric buzzer with a clock or a tuning fork, although the difference in sound was detected, failed to aid in localization; rather it served only to make the subject more uncertain. A significant additional observation was that those subjects considered by the experimenter to manifest the less satisfactory somnambulistic trances showed less time lag in detecting and the greater ability in localizing sounds, but even these subjects showed a perseveration of first localizations.

Impairment of Sound Discrimination. While investigating the loss of ability to localize sounds in those subjects continuing to hear faintly despite suggestions of a deafness, the experimenter had read aloud slowly from a book while the subject watched and listened intently. At a prearranged passage, an assistant concealed behind a screen continued the reading while the experimenter silently mouthed the words. The altered character and location of the sound was not noted even after many repetitions, and the use, in one instance, of a feminine voice. However, cautious inquiry did disclose that, during the reading, a brief passage had been decidedly more difficult to hear, but that this difficulty had cleared rapidly. Inquiry failed to identify the particular phrases causing the increased difficulty in hearing, but the subject's uncertainties when questioned about the last phrases read by the experimenter and those read first by his substitute were suggestive of auditory threshold changes unperceived by the subjects.

While investigating spatial localization by the use of two alarm clocks, among those used were clocks with different-sounding alarms. This was not detected by the subjects. Tuning forks of different notes were also employed without detection. However, when an electric buzzer was paired with a tuning fork or an alarm clock, the difference was noted but only after a time lag of 10-20 seconds. A final investigative measure was to inform the subject that he was to listen to a series of sounds given at intervals of two minutes and that he was to note whether or not they were all the same. During the first two trials, he was allowed to watch the experimenter operating a single key on a dummy keyboard while the sounds were actually produced by the secret operation of a concealed keyboard. He reported that the same sound had been made repeatedly. For the additional trials he was blindfolded. In each instance, in a random fashion, different sounding buzzers,

bells, tuning forks, and clocks had been employed, but the only difference reported was that of volume, the subject being quite certain that only one sound had been employed.

Selective Deafness

Certain of the subjects were noted to exercise a peculiar selective process in becoming deaf, some doing this spontaneously, and others stipulating, for reasons to be discussed later, that they be allowed to hear certain sounds, a stipulation which, in itself, is significant.

Three subjects in particular seemed to be unable to accept intellectually the suggestions for deafness. They were amused by the experimenter's inquiries, conversed freely, and demonstrated full hearing ability until a chance incident disclosed that the first of these subjects was hearing only the usual expected sounds appropriate to the situation. The dropping of a pencil, footsteps and voices outside the door, and street sounds were picked up more readily than by the experimenter. However, during the conversation, a button was accidentally pushed on a concealed keyboard sounding an electric buzzer. This was not detected by the subject who laughingly commented on the squeaking of the experimenter's chair as he leaned back. Following this discovery, extensive systematic investigations were conducted, and it was found that any number of sounds could be produced without the subject's knowledge. He was given the task of reading aloud slowly and distinctly while the experimenter ostentatiously timed him with a stopwatch and made extensive notes. During the reading, an electric switch was secretly operated, sounding a loud buzzer, almost imperceptibly at first and then more and more noisily, but he failed to notice it or to react to it by raising his voice, although it was noted that an automobile horn, the street car, or other disturbing sounds would evoke this response.

The investigation was continued by blindfolding the subject. Deprived of visual cues, he apparently reacted to his situation as a totally new one in which he could expect anything to happen, with the result that no evidence of any deafness could be discovered. At another session, unblindfolded, he was again found to be deaf to the sounds he had heard when blindfolded.

Similar results were obtained with the other two subjects with the exception that both, after the blindfolding experience, seemed to regard the test noises as expected sounds and hence were no longer deaf to them, but they were still deaf to new test sounds. In addition, it was found with one subject that prolongation of electric buzzer or bell sounds for five or more minutes would break down the deafness and the subject would slowly begin to hear it and thereafter would continue to be able to hear it. Apparently, summation processes developed in this subject.

Another form of selective deafness was that shown by one subject who had an exceedingly strong prejudice against being seen in the trance state by a third party. Previous experience had shown, however, that he was willing to go into a trance in the presence of others providing they were blindfolded. During the experimental work, he was found to be deaf to all sounds except the experimenter's voice and to those sounds seemingly constituting a threat to his prejudice, such as a knock at the door, footsteps in the corridor, or someone calling to the experimenter from outside the room, and so strong was his objection that he would tend to awaken

immediately despite the fact that he knew the door of the laboratory to be locked. This prejudice suggested the following clinical test. With the subject's eyes cataleptically closed, a visitor, blindfolded to guard against difficulties should the subject awaken, was introduced surreptitiously into the room. A conversation was begun with the subject in which he participated to prove his contention he could hear everything. The visitor joined in the conversation, addressed remarks to the subject, called him by name, but the subject failed completely to perceive the visitor's presence. In a later session, the visitor was allowed to touch the subject who immediately recognized the touch as alien, awakened at once but was entirely relieved by discovering that the visitor was blindfolded.

Still another type of selective deafness was shown by a subject from Group A. It was discovered that whenever the hypnotic state was induced, he spontaneously developed a total deafness for every sound except the experimenter's voice. There was never any need to instruct him to become deaf, and it seemed impossible for him to hear any sound more than briefly, even when instructed to do so. For example, he was told to converse with a third person while he was in the trance state. The first two or three remarks addressed to him were heard readily, but thereafter he would gradually cease to hear that person's voice even though he could see the speaker's lips moving. Instructed to listen to an electric bell, he would direct his attention as told but almost immediately a spontaneous deafness would develop. Repeated efforts made to suggest directly a total deafness that would include the experimenter's voice failed completely, but a long period of silence on the part of the experimenter would result in the effective development of such deafness spontaneously. However, after the development of such deafness, continued talking by the experimenter while the subject watched his lips would serve to restore his ability to hear the experimenter, but a similar procedure with other speakers would fail. The results on all other clinical tests indicated total deafness for the subject. Further mention of this subject will be made in Section II of this paper.

Hallucinatory Phenomena and Dependence on Visual Cues

Certain of the subjects who reacted to total deafness with panic and shock reactions, to be described later, insisted upon being allowed to retain the ability to hear some chosen sound. When this concession was made, they developed apparently total deafness to all other sounds. Investigation soon disclosed that their wishes could be met by limiting their hearing to the single sound of a special clicking pendulum. Stopping of this pendulum was detected immediately and also invariably interpreted by them as the cue for the restoration of hearing despite instructions to the contrary. Apparently such a procedure was regarded as an absolute violation of the trance conditions. Resort was then had to the following subterfuge: Two pendulums were rigged, one sounding and concealed, the other silent and visible. Both were set in motion simultaneously and the subject was allowed to associate the sound of the first with the motion of the silent one. Then, after the deaf state had been induced, the subject was given a written statement to the effect that he might watch the pendulum but that as he did so his ears would be stopped so that he could not hear it, and when he had ceased to hear it, he was to inform the experimenter. He was further informed that his ears would then be freed gradually so that he would first hear the sound very faintly and then more

and more plainly as he watched the swinging pendulum. This instruction was repeated two or three times until the subject understood fully. Finally, when the subject's ears were fully obstructed, his mouth closed, and even his nose closed for the moment, an assistant secretly interrupted the sounding pendulum, permitting the silent visible pendulum to continue its motion. The subject's ears were then gradually released while he was instructed to watch the pendulum closely and to inform the experimenter as soon as he heard the first faint sound. As soon as he signified this, his ears were gradually freed entirely. In each instance the subject, convinced by his visual impressions, was content with an hallucinatory hearing of the pendulum sounds and the substitution was never detected. Nor was the setting in motion again of the sounding pendulum detected while the subject was contenting himself with hallucinatory hearing. Stopping of this silent pendulum without the subject's knowledge had no effect upon him, but when he was permitted to see the pendulum stopped, he immediately regained his hearing. Even before the employment of the two-pendulum subterfuge, it had been observed that these subjects were dependent upon visual cues, since they consistently refused to be blindfolded for clinical tests without an absolute promise given not to stop the pendulum. Their explanation was that they did not want to be "tricked," an explanation suggestive of their subjective lack of reliance upon auditory experiences.

Associated Sensory Changes and Motor Disturbances

Frequently in the induction of hypnotic deafness, the subjects would spontaneously develop other physiological changes, apparently as an essential feature of the deafness. Thus, one subject, who developed total deafness according to all tests, experienced a distressing decrease in vision. Reading was exceedingly laborious for him, writing likewise, and his movements were groping and uncertain. In addition, there was much subjective anxiety over his visual loss. Physical examination of his eyes disclosed widely dilated pupils, a failure of focussing and irregular jerking movements of the eyeballs.

A second subject manifested a generalized anesthesia, most marked in his arms and legs. Inquiry elicited from him that his limbs were "numb, feelingless, sound asleep" and it was not possible for him to move or to use them spontaneously. Careful tests failed to elicit any evidence of feeling in his hands.

Several of the other subjects manifested sensory losses with the deafness but to a lesser degree. Efforts were made at first to correct these losses, but it was soon found that suggestions lessening the associated sensory disturbances had the effect of decreasing the degree of deafness. Also, it was learned that in these subjects, it was not possible to induce deafness unless they were allowed to develop other sensory disturbances. Furthermore, in subjects who previously had failed to develop deafness, a suggestion technique embracing other sensory disturbances as, for example, combined deafness and anesthesia, would often be effective. The spontaneous development of these sensory and motor disturbances may reasonably be regarded as confirmatory evidence of auditory changes since they imply a marked disturbance of general functioning.

Apparently Total Hypnotic Deafness

Responses to Clinical Tests. To investigate the apparently total hypnotic deaf-

ness manifested by a number of subjects, use was made of a great variety of clinical tests. A few examples follow:

1. Vibration tests:

a. Detection of a response to loud noises through vibration caused in floor, sounding boxes, etc. instead of response to sound itself.

b. Lack of confusion of vibratory sensations and sound sensations when sounding tuning fork is held in close proximity to ear while a silent tuning fork is pressed against the mastoid bone and vice versa.

2. "Startle" situations:

a. Lack of response to joke noisemakers such as inflated rubber bladders placed under chair cushions, trick boxes setting off explosive caps when opened or making other sudden sounds, etc.

b. Failure of surprise reactions when, after repeatedly watching a tin pan dropped noisily to floor behind desk, the pan drops noiselessly into a secretly released net.

c. Failure to start, to turn head or eyes, or to show compensatory withdrawals or tensions to sudden sharp unexpected sounds.

3. Voice raising and lowering tests:

a. Failure to raise voice when reading aloud while an irrelevant continuous extraneous noise becomes increasingly disturbing.

b. Failure to lower voice or to falter at sudden cessation of disturbing continuous extraneous noise when reading loudly.

4. Social situations and involuntary responses:

a. Failure of response to interruption by a third party to subject's conversational remarks.

b. Failure to respond with perfunctory courtesies, as for example, showing no response or hesitation, while returning his pack to his pocket, to the verbal acceptance of a proffered cigarette following an observed silent refusal.

c. Failure to show any response to deliberately embarrassing remarks made to subjects known to blush easily.

5. Psychological trickery:

a. Failure of the subject to include illegitimate data after the following procedure was followed: While the subject was deaf, apparently to inform the assistant, a long list of confusing associated facts, such as a genealogical tree, was read aloud repeatedly with much detailed discussion. A purported carbon copy from which certain data were omitted was given him as a "memory test" which he was to memorize and recall as completely as possible in a given length of time.

b. Failure to benefit by elaborations, given apparently to assistant, of written instructions.

c. Failure to benefit by casual assistance given during the oral translation of a long difficult passage.

d. Failure to develop sophistication or to show amusement when subject sees assistant tricked by joke noisemaker.

6. Conditioned responses:

Simple preliminary experiments on the establishment of conditioned responses based on auditory cues, and on the evocation of similar already established conditioned responses, were included as clinical tests. The significant results obtained gave rise to the experimental work to be reported in the second part of this paper.

Of the ten subjects originally considered as showing total deafness, four were found to be only partially deaf. The remaining six were found to be consistently deaf to all of these tests. These subjects were all from Group C.

Behavior Reactions to Induced Deafness. All of the subjects employed manifested definite subjective reactions to the hypnotic deafness. These reactions may be classified under three categories, (a) curiosity, (b) panic, and (c) shock, since they appeared in combination with one or another reaction dominant.

(a). *Curiosity.* Those showing predominantly a reaction of curiosity would manifest a considerable degree of astonishment at the onset of the deafness, and, when reassured by the written statement, "*Everything is all right—just some experimentation—tell me what you hear,*" would manifest intense and decidedly childish curiosity and wonderment, dropping objects, listening vainly to watches, banging things, talking to themselves—particularly this last form of activity—often so self-absorbed that it was difficult to secure any satisfactory subjective account from them initially.

(b). *Panic.* Those who manifested panic reactions were decidedly difficult to manage. In producing deafness, routine suggestions to allay fear reactions were always given but these were worded carefully to avoid possible influence upon the general state desired and hence they were often ineffective.

Despite this instruction, a number of subjects displayed marked panic reactions, showing marked fright, probing their ears with their fingers, shouting that they could not hear, and asking importunately what had happened, since they had complete amnesia for the trance suggestions and often did not realize that they were at the time in a hypnotic trance. Some, when their hearing was restored by the proper visual or tactile stimulus, were most emphatic in demanding that no further experimentation in regard to deafness be done with them. When persuaded to the contrary, much reassurance was required concerning the temporariness of the phenomenon, and the completion of each experimental session was marked by much subjective relief. These same panic reactions occurred, but to a lesser degree, in some of the subjects showing only impairment of hearing. Also, certain subjects reacted so strongly that, in subsequent experimentation, they refused to develop total deafness, insisting that they be permitted to retain the ability to hear some sounds, which has been described above.

(c). *Shock Reactions.* The third category of behavior was that of shock reactions. These occurred chiefly among those who manifested apparently total deafness, although it was shown to a lesser degree by those who manifested only auditory impairment. Induction of deafness was characterized by the more or less generalized associated sensory changes described above, accompanied by much physical tension, slowing of general reactions, and an appearance and complaints of severe physical discomfort which tended to disappear gradually. When, however, after having been made deaf, they were given a visual or tactile cue restoring their hearing, definite shock reactions appeared. Immediately upon perceiving the cue, there would appear a violent tensing of the entire body followed often by generalized tremors. Usually, the subject would clasp his hands to his ears, and frequently his face would contort as if he were experiencing severe pain. The pulse rate, too, was noticed to increase, sometimes 30–40 beats per minute. Respiration was frequently marked by gasping and deep sighing. Almost invariably, the subject would speak in a loud tone as if trying to make himself heard above a noisy disturbance. After 2–3 minutes, the subject would begin to relax. Not every subject manifested all of these symptoms—some showed only two to three and others showed all of them. Subjectively, they described it as most decidedly unpleasant and painful. One subject described his experience as "just like being in the midst of a deep, peaceful silence and then being thrown forcibly into the din of a boiler factory going full blast. It's just painful and it hurts you all over." Several subjects who experienced the more painful reactions, after one or two experiences, refused to permit further experimentation because, "It's too painful."

This refusal was met by developing a technique for slow restoration of hearing which, as sessions were repeated, was gradually abridged to a 3-5 second procedure. One subject, however, would not permit any shortening of the procedure, but insisted on a 3-4-minute period, since, otherwise, she explained, she would develop a severe headache. This same subject also insisted, for the same reason, on being awakened slowly from a deep trance, and usually a period of 3-5 minutes was required to awaken her comfortably. Others did not develop the shock reactions at all, and still others, after two or three experiences, overcame them spontaneously.

Post-experimental Findings

Some weeks after completing the clinical investigations, a systematic inquiry was conducted with the subjects to determine their post-experimental reactions. In each instance, the subject was found to have a complete amnesia for the whole experience, the usual report being, "Well, I reported regularly, you would begin to hypnotize me and then I would find myself waking up and you would dismiss me. I know sometimes you kept me as long as four hours, but I don't know what happened." Extensive questioning by an assistant failed to elicit any other significant information except the fact that frequently they were so fatigued after the session that they had gone to bed immediately.

Inquiry was then made in the form of a hypothetical question concerning their opinion about the possibility of inducing by hypnosis the various phenomena that had been elicited. About 15 of the 30 scoffed at the idea. The majority of these were those who failed to manifest any form of deafness, but most interesting was the inclusion in the group of two of the six showing complete deafness. About half of the remainder were undecided but inclined to be dubious, and these were chiefly those who had shown various degrees of impairment of hearing, although one of those showing total deafness was included. The remainder were uncertain but inclined to favor the possibility, advancing arguments best illustrated by the following remarks offered by one of those showing total deafness: "Well, take last Saturday's session. When I sat down for you to hypnotize me, I pulled out my watch and it said 6 o'clock. I started to put it back, and then I took a second look at it and it said 10 o'clock. But before I could figure that out, I noticed that it was dark outside, my coat and tie were off, my sleeves rolled up, and I was just about exhausted, and it really was 10 o'clock. Now, if I could lose consciousness like that, and it's happened lots of times, I think that you could lose hearing or sight or feeling the same way. It's probably the same sort of feeling."

Following this questioning, the subjects were asked to behave deliberately as if they were deaf, and thus, to impose upon the experimenter the task of proving, against their efforts and without their assistance, that they could hear. To avoid unintentional hypnotic responses, an assistant administered the various clinical tests given in the discussion of total hypnotic deafness. All of these tests were failed, usually with full awareness on the part of the subject of his failures, although in some of the vibration tests and some of the procedures involving psychological trickery, the subject remained unaware of his failures. Also, not one of the subjects showed any of the phenomena elicited in relation to impaired hearing. Even a direct suggestion that they stimulate impaired hearing failed to secure more than an obvious pretense. Apparently, despite actual past experience, they had no conception of what impairment might mean.

Finally, they were taken into confidence by the experimenter and an assistant and instructed to simulate deafness for the purpose of deceiving a second assistant. Despite the sophistication and coaching effects accruing from the previous attempt, the test results were the same, since slight variations in the test procedures served to offset any control of their responses they had established. However, during this part of the investigation, three of the subjects who suddenly began passing the tests after initial failures were found to have developed spontaneously a hypnotic trance, and repetition of the tests in an actual waking state resulted in complete failure.

SUMMARY

THE CLINICAL FINDINGS obtained may be summarized briefly in the following two categories:

1. Evidence of Changes in Auditory Functioning

a. Alterations in Auditory Threshold.

- (A). FLUCTUATIONS WITH PROGRESSIVE INCREASE OR DECREASE IN HEARING.
- (B). RESTRICTION TO CERTAIN TYPES OF STIMULI—"SELECTIVE" DEAFNESS.

b. Impairment of Hearing in:

- (A). SPATIAL LOCALIZATION OF SOUNDS.
- (B). DISCRIMINATION OF TIME RELATIONSHIPS.
- (C). DISCRIMINATION OF SOUND QUALITIES.
- (D). SUBSTITUTION OF INNER FOR OUTER STIMULI—"HALLUCINATORY" HEARING.

2. Evidence of Total Loss of Hearing

a. Appropriate Response to Vibratory Stimulation other than Sound.

b. Absence of "Startle" Reflexes.

c. Failure of Habitual, Ingrained, or Voluntary Patterns of Behavior Arising from Auditory Stimuli.

d. Complete Limitation of Responsive Behavior to Stimuli Legitimate to the Deaf State.

DISCUSSION

IN COMMENTING upon these experimental findings, mention must be made first of the problem central to the whole investigation, namely, the question of the possible identity of *absence of response* and *absence of hearing*. Within the limits of this investigation, the one is taken as indicative of the other; likewise, alteration of response is regarded as evidence of alteration of hearing. Although pragmatically the same, the question of their absolute equivalence does obtain, but this question does not invalidate the experimental results. Furthermore, definite efforts were made to elicit the responses properly and ordinarily evoked by auditory stimulations, some of which were voluntary, others involuntary. Often, no response of either sort could be obtained and those that were elicited were incomplete, inadequate, or inconsistent with the stimuli employed in their evocation. Such findings

are inexplicable except on the basis of significant neuro-psychic changes, induced in the subject by hypnotic suggestions, serving to produce a loss of response to sound identical in character with the loss found in organic deafness.

1. The Hypnotic Technique

The prolonged systematic development of the stuporous and somnambulistic trance states as contrasted to the usual rapid superficial induction of such states probably contributed greatly to the final results. Such a technique served to establish a massive generalized state of "inhibition," rendering the subjects incapable of spontaneous responses and restricting them to limited responsive behavior. The obtaining of more extensive results from those subjects responding fully to the complete technique indicates significant role of these profounder trance states.

2. Progressive Increase in Deafness

This finding suggests changes in the auditory threshold rendering previously appreciable stimuli subliminal. Particularly is this indicated by the appearance of the process of summation, which in turn, suggests changes in conduction through alterations of synaptic resistances. With such summation processes, it is difficult to explain this finding entirely as an inhibition of either responses or perceptual activity.

3. Progressive Decrease in Deafness

This finding is in accord with work on changes in sensory thresholds permitting detection after repeated stimulation, of previously subliminal stimuli. As in the case of progressive increase in deafness, changes permitting processes of summation seem to enter into the condition also, as well as the possibility of various inhibitory processes. Concerning the subjective reactions to both progressive increase and progressive decrease of deafness, whatever the experience was for the subjects, they identified it with actual past experience and thus endowed it definitely with a subjective validity.

4. Impairment of Spatial Localization

This unexpected finding, for which no suggestions were given, indicates directly a changed character of the auditory stimuli perceived. Whether it derives from failure of perceptual processes or from altered conduction and radiation of auditory nerve impulses is speculative, but its appearance does denote a significant change in hearing.

5. Impairment of Discrimination of Time-Relationships

This too, was a spontaneous and unexpected development and it gives rise to such difficult questions as: What did the subject continue to hear after the sounds ceased? Was the time lag a function of summation processes? Why did the subjective perseveration of hearing of a sound blend into the hearing of a successive and different sound? Speculation is warranted on delayed perceptual processes, threshold changes, and processes of summation.

6. Failure of Discrimination of Different Sounds

This finding may be considered as arising at least in part from direct suggestion,

but the persistence of some ability to hear and the actual ability to discriminate between immediately successive sounds implies other factors at work. The failure of memory processes indicates definite restriction of perceptual activity and a loss of various sound values for which immediate contrast was necessary. The ability to discriminate between immediately successive sounds of different character suggests no changes in conduction or radiation of nerve impulses, but the tests employed were not sufficiently refined to permit the detection of such changes. Hence, conduction or radiation changes could be masked by the crudity of the tests employed. However, the partial or limited perceptual responses made suggest that failure of discrimination may be attributable to a number of factors.

7. "Selective" Deafness

Somewhat analogous to this finding is the instance of the person who sleeps soundly through a noisy disturbance yet awakens readily at the occurrence of a slight preselected sound, or the ability of experienced workmen to converse in natural tones in the overwhelming din of a noisy factory. These instances from normal life, as well as the experimental findings, suggest that it is possible to regulate the perception of sounds to those having certain perceptual values. However, an immediate question is: Is it not necessary to experience all sounds before a "selection" can be made? Hence, the process would simply be an inhibition of perceptual responses. Or is the process one of "setting" the auditory thresholds so that it can be sensitive to only certain stimuli? This is suggested by the experimental findings on the subject who could hear a voice in the corridor outside the locked door but could not hear the same voice within the locked room, and hence, altered in its secondary auditory qualities. Also, the experimental situation left the subject free to "select" any sound but apparently only those sounds having secondary attributes of "expectedness" or "appropriateness" could be "selected." Apparently, hearing depended not only upon sound itself, but upon other qualities. Briefly, the findings suggest that "selective deafness" or, conversely, "selective hearing" could occur only after the inception of various psychic processes of a nonhearing character, initiated by stimuli arising independently of sound itself and not constituting a part of the experience of hearing. Without such preliminary psychic activity, sound stimulation remained subliminal in character. This is indicated also by the summation processes that could be induced. The selective deafness of the subject who objected to being seen in a trance state indicates the effectiveness, subjectively, of the deafness, and his ready response to an alien touch suggests the specificity of the sensory disturbance. The findings on the subject who developed deafness spontaneously despite efforts to train him to hear suggest that hypnosis had effected changes in him which precluded the development of perceptual processes. In brief, this disturbance in auditory functioning seems to be one occurring in the states of hearing preceding perceptual activity and not a process of inhibition of perception.

8. "Hallucinatory" Hearing

This finding suggests that the auditory disturbance was of such character that actual sounds could not be differentiated from sound images, that reality attributes of sound had been lost, permitting an effective substitution of internal for external stimuli. That there was an actual loss in sound qualities is suggested by the failure of the subject to respond to the restarting of the sounding pendulum following his

hallucination of it. Theoretically, there should have been a marked contrast of a disturbing character between the sound image arising from inner stimuli and the renewed external sound. That there was no such contrast indicates significant changes in auditory functioning.

9. Sensory and Motor Changes

The associated sensory and motor disturbances developing spontaneously, either in association with the deafness, or the hypnosis itself, may be regarded as significant confirmatory evidence that hypnotic states do alter psychological and physiological functioning.

10. Apparently Total Deafness

The totally negative results from a battery of varied clinical tests on six subjects, confirmed by results of similar character but lesser degree on other subjects, indicate that massive alterations may be induced hypnotically in auditory functioning. That auditory nerve stimulation did occur cannot be doubted, but what disposition was made of those stimulations may be speculated upon in the light of the evidence afforded by the lesser degrees of auditory impairment. That the clinical tests employed, despite their variety and directness or indirectness, were entirely adequate to detect complete absence of response is open to question, but the extensiveness of the auditory changes cannot be questioned. The conclusion is warranted that there was produced a condition not distinguishable from neurological deafness by any of the ordinarily competent tests employed. Essentially, the problem revolves about the question raised above, namely: Is being unconscious of a sound identical with failure to respond to a sound?

11. Subjective Reactions

While confidence cannot be placed extensively in subjective reactions, even those objectively observed, nevertheless, the consistency, the unpleasant character and the intensity of the reactions manifested by the subjects of this investigation are indicative of subjectively tremendous alterations in neuro-psychic functioning. They signify changes beyond the normal control of the subjects which had to derive from actual psychosomatic experiences. Accordingly, these subjective reactions may be regarded as constituting significant evidence of neurophysiological changes.

12. Post-Experimental Findings

Despite full cooperation and earnest sincere efforts, the subjects failed to duplicate in the waking state the performance made possible by hypnosis, and even to realize the possibility of so doing, despite the fact that, unknowingly, they had undergone very clear experiences. One may venture the hypothesis that their failure in the waking state resulted not from incapacity, since capacity had been demonstrated, but from a "mental set," contingent upon wakefulness, precluding the initiation of the remote preliminary mental processes leading to the actual performance.

A Study of Clinical and Experimental Findings on Hypnotic Deafness

II. Experimental Findings with a Conditioned Response Technique*

TWO OF THE SUBJECTS included in Group C who had manifested total deafness according to clinical tests were used for further extensive study of the phenomenon by the technique of a conditioned response. These subjects, to avoid the possibility of sophistication, had not been subjected to the preliminary experimentation with conditioned responses reported in Section I, nor had post-experimental attempts been made to secure conscious simulation of deafness. This was done subsequent to the present experimental work. They were given to understand that the experimenter was now interested in an entirely new problem unrelated to any past work. No new training measures were employed, and the same technique for the induction of the deep sleep, the stupor and the profound somnambulistic state was used. Two other subjects were also employed, but for reasons to be given later, the findings on them will be reported separately.

EXPERIMENTAL PROTOCOL

THE PROTOCOL drafted for this part of the study included the following steps:

1. The induction of a profound somnambulistic trance persisting throughout the entire working period.
2. The evocation of a muscular response by an electric shock.
3. The conditioning of this muscular response to an auditory stimulus.
4. The establishment and removal of a state of hypnotic deafness to determine its effect upon the auditorily conditioned muscular response.
5. Control investigations:
 - A. In waking state:
 - (a) Evocation of the established conditioned response.
 - (b) Establishment of another auditorily conditioned response.
 - (c) Subject's attempt to inhibit voluntarily this second conditioned response, followed by similar attempt to inhibit the first conditioned response.
 - B. In a second hypnotic state:
 - (a) Establishment of a third auditorily conditioned response with no suggested deafness.
 - (b) Evocation of first, second, and third conditioned responses.
 - (c) Subject's attempt to inhibit voluntarily all three conditioned responses.
 - (d) Attempt to establish a fourth auditorily conditioned response in a continuously deaf state.

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THE APPARATUS

THE APPARATUS EMPLOYED consisted of an electric resistance coil with a source of current, a two-way electric switch, hand electrodes, an electric buzzer, a recording tambour connected with a special closed rubber tube constructed like a pneumograph, and a recording apparatus of highly sensitive electromagnetic markers, a long-paper kymograph, and smoked paper. Screens were used to conceal all apparatus from the subject except the electrodes and the closed rubber tube. By means of the two-way switch, two circuits were established. With flow of current in the first circuit, the buzzer would sound and the subject would receive a shock in his hands while the electromagnetic markers would record both the buzzer and the shock. A flow of current in the second circuit would operate the buzzer and its recording electromagnetic marker only. Hence, the subject could receive an auditory stimulus without receiving a shock, but every flow of current to the hand electrodes was in conjunction with the sounding of the buzzer. The special rubber tube was wrapped about the right forearm of the subject and connected with the recording tambour so that the change in the volume of the arm occasioned by muscular contractions was graphically portrayed on the smoked paper of the kymograph. Adhesive tape was used to fasten the electrodes in the palms of the subject's hands, with his fingers fastened in a position of light closure over them.

Using this apparatus, a conditioned response was developed as follows: By means of the hand electrodes, an electric shock of sufficient intensity to cause a direct contraction of the flexor muscles of the forearm was administered to the subject. The delivery of each shock was preceded immediately by the sounding of an electric buzzer. Thus, the auditory stimulus was established as an integral part of the stimulus-complex evoking muscular contractions, thereby acquiring the same property of evoking muscular responses as did the combined stimuli.

THE EXPERIMENTAL PROCEDURE AND FINDINGS

THE SUBJECT WAS HYPNOTIZED deeply in a side room and led, with his eyes cataleptically closed, into the experimental room and seated comfortably in a chair. Following the completion of all connections with the experimental and recording apparatus, the subject was instructed firmly that "it was absolutely essential" that he "remain deeply, soundly asleep regardless of anything that may happen" until he received definite instructions to the contrary. He was to sleep deeply and restfully, permitting nothing to disturb his sleep, and moreover, as he did so, he was to "dream in very great detail about some one pleasant childhood experience, *repeating this dream over and over as time passes.*" The purpose of this last suggestion was to establish a pleasant and, if possible, a dominating mental content far removed from the immediate situation.

In subsequent sessions, the same general instructions were given with the added instruction to repeat the previous dream. No other verbal instructions of any sort were given and the actual experimental work was conducted throughout in silence except for the sound of the buzzer. Immediately after this preparation of the subject, the kymograph was started and the first electric circuit, which included both the hand electrodes and the buzzer with their respective markers, was closed and opened at irregularly spaced intervals. Care was taken to have no constant time intervals between stimuli, and these intervals ranged generally from a fraction

of a second to 15 or more seconds, although there were occasional intervals of several minutes. Also, any systematic grouping of the stimuli was avoided by grouping rarely and then at irregular intervals. The time required for each session ranged from 2-4 hours.

Four experimental sessions were held on succeeding days with each subject. The first session was devoted entirely to establishing the conditioned response. A continuous record of stimuli and response was obtained with the kymograph.

During the first session, 200 combined stimuli were given, although ordinarily only 15-30 are necessary to secure conditioning under similar circumstances. However, it was felt that such long-continued stimulation would serve to establish an exceedingly stable conditioned response.

On the next day, the training of the previous session was repeated to the extent of about 100 combined stimuli for the purpose of reinforcing the learning processes that had been established. The first test was then made for the presence of a conditioned response by operating the second electric circuit whereby the buzzer could be sounded without current being delivered to the electrodes. This auditory stimulus alone was noted to elicit a muscular response. After further reinforcement by combined stimuli, the remainder of the session was spent operating both electrical circuits in an irregularly alternating fashion, and obtaining an adequate record of the presence of the conditioned response. The records obtained disclosed it to be invariably present and sufficiently stable to withstand 20-30 successive trials before showing much evidence of experimental extinction processes. Complete restoration followed a rest period or further combined stimulation.

Five combined stimuli were given at the beginning of the third session followed by a single auditory stimulus to determine the persistence of the conditioned response. Although it was found present in each subject, a series of 50 combined stimuli was given for reinforcement, and this was followed by further testing. Finally, the subject was given a sharp blow on the shoulder to produce deafness and a long series of combined stimuli was given, after which his wrist was squeezed to restore his hearing while the combined stimulation continued. This procedure was repeated several times initially and frequently throughout the sessions, with no attempt made to test for the conditioned response, as a measure of preventing the subject from possibly associating the shoulder and wrist stimuli with tests for the conditioned response.

Following this, deafness was produced and hearing was restored during the midst of series of combined stimuli and series of mixed combined and single auditory stimuli, produced by the operation as the two electric circuits alternately in a markedly irregular and confused fashion both as to the number of times and the relationship to the deaf or hearing states established.

The records obtained disclosed the consistent presence of the conditioned response in all hearing states and its equally consistent absence in all hypnotically deaf states.*

The fourth session began with five combined stimuli, followed by a test for the conditioned response, which was found present in both subjects. Immediately, the subject was rendered deaf by the blow on the shoulder and a long series of combined stimuli was administered, totalling 50 for one subject and over 100 for

*Illustrations of Kymograph responses are omitted. Cf. original publication.

the other. At the close of the series, a single auditory stimulus was interjected in the midst of a group of rapidly given combined stimuli to elicit, if possible, a conditioned response. Since this failed in both instances, the procedure was repeated after an even more extensive series of combined stimuli but with the same negative results. There followed then a repetition of the procedure of the previous day to secure more records of the presence or absence of the conditioned response in accordance with the hypnotic auditory state. These were found to be consistent with those of the previous session.

Briefly, the actual experimental procedure and results may be summarized as follows:

First Session—First Day

1. Series of 200 combined stimuli—shock and buzzer.
2. No test for presence of conditioned response.

Second Session—Second Day

1. Series of 100 combined stimuli—shock and buzzer.
2. Test for conditioned response—(found present).
3. Further reinforcement of conditioned response by combined stimuli.
4. Irregularly alternating operation of Circuits One and Two to secure adequate record of presence of conditional response—(conditioned response present at every test).

Third Session—Third Day

1. Series of 5 combined stimuli.
2. Test for conditioned response—(found present).
3. Series of 50 combined stimuli for further reinforcement of conditioned response.
4. Irregularly alternating operation of the two circuits—(conditioned response present at every test).
5. Production of hypnotic deafness and restoration of hearing several times with administration of only the combined stimuli during these initial deaf states.
6. Production of hypnotic deafness in midst of series of combined or auditory stimuli with continued irregularly alternating operation of the circuits—(conditioned response consistently absent).
7. Restoration of hearing in midst of series of either combined or auditory stimuli with continued irregularly alternating operation of the circuits—(conditioned response consistently present).

Fourth Session—Fourth Day

1. Series of 5 combined stimuli.
2. Test for conditioned response—(found present).
3. Production of hypnotic deafness.
4. Long series of combined stimuli—60–100.
5. Test for conditioned response—(found absent).
6. Further repetition of (4) and (5)—(similar result).
7. Further repetition of (6) and (7) of third session—(similar results).

The completion of this experimental work was followed by control studies as planned in the protocol, but in combination with clinical investigations directed to the securing of additional significant data before undue sophistication of the subjects developed from the control procedures.

The succession of steps in these combined clinical investigations and control studies was as follows:

1. Extensive questioning of the subjects in the waking state and in an adjacent room by a third person and the experimenter without discovering any awareness of the entire situation or any specific recollections for the separate experimental sessions.

2. Repetition of this questioning in the experimental room both before and after making the connections with the experimental apparatus and giving the instructions to think freely and talk readily about anything that came to mind, without eliciting any further information.
3. Evocation of conditioned response upon closure of second circuit with a spontaneous subjective belief expressed that an unpleasant electric shock had been delivered.
4. Subject's report of a rapid decrease in the intensity of the shock until it was not perceptible, as the conditioned response was elicited repeatedly by proper stimulation and without reinforcement. Restoration of the feeling of a shock after a rest period occurred followed by a more rapid experimental extinction of that feeling upon continued testing for the conditioned response which remained consistently present.
5. Evidence of experimental extinction processes after 20-30 successive conditioned responses.
6. Restoration of conditioned response after rest period but followed by more rapid experimental extinction.
7. Restoration of conditioned response by combined stimuli, with spontaneous report from subjects that the current had been "turned on again very strong."
8. Rapid learning by subjects to discriminate the presence or absence of electric current but without effect upon the conditioned response.
9. Disclosure by the subjects of only irrelevant associations for the feeling of the shock and no recollection of any similar experience within the recent past.
10. The use of an associate's apparatus to establish a finger withdrawal conditioned response based on auditory conditioning.
11. Failure of voluntary inhibition of this second conditioned response.
12. Failure of voluntary inhibition of the original conditioned response.
13. Delay of experimental extinction of both conditioned responses occasioned by attempts to inhibit them voluntarily.
14. Induction of a new hypnotic trance with instruction for a complete amnesia for all previous trance experiences and instructions.
15. Evocation of first as well as second conditioned responses.
16. Establishment in this hypnotic state of a third similar conditioned response based on an auditory stimulus.
17. Evocation of this third conditioned response in the waking state without additional training.
18. Induction of another hypnotic trance during which extensive insistent and emphatic instructions were given to the subjects, commanding them to inhibit both in the trance state and post-hypnotically all three conditioned responses.
19. Failure both in the trance state and post-hypnotically of all attempts to inhibit the conditioned responses.
20. Failure to evoke any of the conditioned responses after the induction of another deep trance and the production of the hypnotic deafness, but reappearance of the conditioned responses upon restoration of hearing.

Since the questioning done in Steps 1 and 2 of the combined clinical investigations had yielded no information, a deep hypnotic trance was induced and the subject was instructed to recall in complete detail and in chronological sequence every event of each experimental session.

The recollections obtained in this way were essentially the same for both subjects. A statement was made covering the details of bringing the subject into the experimental room, seating him, putting "things" in his hands and around his arm, and telling him to dream. The subject then summarized the rest by stating that a long series of buzzer sounds and shocks had followed, while he absorbed himself in his dream. Further instruction was given that he must verbalize the events fully no matter how monotonous it became until he had actually completed recounting the entire session. There followed a long series of over 100 utterances of "buzzer-shock" irregularly spaced and grouped in a manner suggestive of the actual experience, after which an account was given of the disconnecting of the apparatus. One observation of note was that from the beginning, the subject closed his hands each time he said "shock."

The second session was recounted in essentially the same way with the continued closing of the subject's hands at the word "shock," an item of behavior that remained consistently present during the recollection of each of the experimental sessions.

In recounting the third session, after about 15 minutes of monotonous utterances of "buzzer-shock," the subject was noted suddenly to say "shock" only. Thereafter, in an irregular fashion, found by reference to the kymograph record to parallel crudely the actual experimental procedure, he continued to alternate the utterances of "buzzer-shock" and "shock."

The fourth session was begun with three utterances for one subject, four for the other, of "buzzer-shock" followed by a long series of "shock" alone, finally concluding with an irregularly alternating series of utterances of "buzzer-shock" and "shock."

As an additional measure, adequate instruction was given to the subjects to the effect that a recollection of selected parts only of the experimental sessions would now be required, and at the proper verbal command, they were to recall the specified part of any particular session. In this manner repetitions of their recollections were obtained in a systematically random order of the first and second halves of each of the four experimental sessions, and these repetitions were found to resemble closely the original recollections.

During the first recalling of the experimental sessions, the experimenter had maintained complete silence. The repetitions of parts of sessions required interruption of the subject by verbal commands and this led to an unexpected discovery. By chance, in the repetition of part of the third session, the experimenter attempted to interrupt the subject while he was saying "shock" alone. No heed was given to the experimenter and the instructions were repeated without attracting the subject's attention. They were again repeated while the subject was saying "buzzer-shock." An immediate response was obtained from him. Thereafter, it was found that the subjects' attention, readily obtainable when they were uttering "buzzer-shock," could not be secured by verbal stimuli when uttering "shock." Observation was also made that as the subject shifted his utterance from "buzzer-shock" to "shock" alone, there occurred a marked change in his appearance, his face becoming more rigid and expressionless, his body tense, and his speech slightly slowed.

In brief, the recalling of the experimental sessions was literally a reenactment of them with an actual reliving of the experience.

As a separate task, each subject was ordered to narrate in complete detail the

content of the dream he had been instructed to have during the course of the experiment and to repeat his narration of it as often as he had redreamed it.

The dream of one subject centered around a boyhood play activity, that of the other around an early visit to a theater, both dreams being pleasant, interesting, and rich in detail.

The narration and renarration of the dreams for the first and second sessions showed essentially no significant variations, occasional details being omitted and new ones included. However, in narrating the dream for the third and fourth sessions, certain significant variations in content occurred. Sometimes a small part of a scene, at other times a whole episode, was omitted, causing the previously fluent account to become patchy and even fragmentary in character. When questioned directly concerning these omissions, the subjects could reply only, "I don't remember dreaming the next part this time. My dream stopped there and then it began further on," and no explanation could be obtained from them. Study of the kymographic record in relation to the occurrence of the omissions of dream content suggested a direct relationship between the omissions and the periods of deafness, and hence the possibility of a different or deeper level of mental functioning. Accordingly, the subjects were given additional emphatic hypnotic instructions to recall fully and completely every item of the dream as it had occurred. Following these instructions, the narration of the dream proceeded without any omissions, but with certain new inclusions of an unpleasant character, not in keeping with the dream content, and actually constituting apparently inexplicable distortions of the dream. Thus, at irregular intervals, the subject dreaming of his boyhood play actively interjected the statements of, "He (one of the dream characters) hit me," or, "He jerked me," while the other subject interjected statements about the "man behind bumping" him or of his seat mate "grabbing" his arm. These interjections were always followed by the change in appearance described above or by the disappearance of those changes. After several manifestations of this behavior, an attempt was made to interrupt the subject's narration of the dream by questions. It was found impossible to secure his attention while this change in appearance persisted, but verbal interruption was readily possible at any other time. Careful indirect questioning concerning experimental events disclosed that after such "hitting" or "bumping" the events of the experimental session were consistently recalled as "shock-shock-shock," and that after the "jerking" or "grabbing" they were recalled as "buzzer-shock, buzzer-shock." Also, despite elaborate questioning, no mention could be obtained of the wrist or shoulder stimuli as such. Rather, they seemed to have been assimilated into the dream content as "jerking" or "bumping" and not recognized for what they were. Also, indirect questioning concerning the sounding of the buzzer alone failed to disclose any realization of such an occurrence.

FINDINGS ON ADDITIONAL SUBJECTS

THE FINDINGS OBTAINED from the third subject are given separately since this subject, although not psychotic, was a patient in a mental hospital, had been given slightly different preliminary training, and had not been accessible for post-experimental investigation. The experimental results obtained were definitely confirmatory but were marked by the following peculiarities:

1. The conditioned response obtained invariably underwent experimental extinction after 6-10 trials, and restoration required a considerable amount of retraining.
2. Hypnotic deafness tended to develop spontaneously, seriously handicapping the development of a conditioned response and frequently accounting for an apparent experimental extinction.
3. An extensive hypnotic anesthesia tended to develop spontaneously, interfering seriously with perception of the electrical stimulus.
4. Hypnotic deafness could be produced or abolished only by slow measures, 1-5 minutes being required for the development of deafness after the shoulder stimulus had been given, and similarly for the restoration of hearing after the wrist stimulus.

However, extensive experimentation did disclose:

1. That in a deep hypnotic trance, a conditioned response based on an auditory stimulus could be produced and that this conditioned response, after undergoing experimental extinction, could be restored promptly upon additional training.
2. That the development of hypnotic deafness, either spontaneously or responsiveness, abolished this conditioned response and precluded its reestablishment by long-continued training.
3. That restoration of hearing would result in the reappearance of the conditioned response and would permit its reestablishment after experimental extinction.

The fourth subject had been recommended to the experimenter as capable of readily developing exceedingly stable conditioned responses. He was given the same hypnotic training as the original two subjects and underwent the same experimental procedure for the first two sessions, but without developing any conditioned response. At a third session, he was given approximately 500 combined stimuli with periodic tests for the presence of a conditioned response. Since even this extensive training failed to establish a conditioned response, a clinical investigation was made. This soon disclosed that the subject, upon being hypnotized, spontaneously developed a deafness for all sounds except the experimenter's voice and that a period of silence on the part of the experimenter would result in deafness even for this voice. Repeated unsuccessful efforts were made to train the subject to retain his hearing, but apparently the spontaneous deafness constituted an essential element of the deep trance for him.

Following these failures, an attempt was made, while the subject was in a deep hypnotic trance, to elicit the other auditorily conditioned responses he had developed in the waking state for the worker who had recommended him. These could not be elicited.

At another session, in the waking state, the subject was tested for the previously established conditioned responses which were readily elicited, although there had been no intervening training. He was then tested for a conditioned response to the training the experimenter had given him, but none was elicited. After several trials, he was given five combined stimuli, and upon testing, he manifested a conditioned response. Reference to his previous learning records disclosed the appearance of a conditioned response after six combined stimuli and hence no statement can be made concerning any economy in learning.

After the establishment in the waking state of this conditioned response, the subject was given extensive training for several days. Following this, he was hypo-

tized and attempts were made to elicit the established conditioned response. These attempts failed as did an attempt to reestablish the conditioned response by further extensive training in the trance state. Tests for the previously established conditioned response also failed. Tests made immediately upon awakening disclosed all of the conditioned responses to be present.

SUMMARY OF EXPERIMENTAL RESULTS

THE EXPERIMENTAL RESULTS obtained may be summarized as follows:

1. After repeated stimulation by a stimulus complex consisting of an electric shock and an auditory stimulus, a muscular response in a hypnotic subject was evoked invariably by the auditory element alone, constituting a conditioned response.
2. This conditioned response was consistently present under ordinary hypnotic conditions and was sufficiently stable to permit 20-30 successive evocations before showing much evidence of the process of experimental extinction.
3. The induction of hypnotic deafness invariably abolished this conditioned response.
4. The hypnotic restoration of hearing invariably permitted the reappearance of this conditioned response.
5. Various appropriate control procedures disclosed the following results:
 - a. Similar and consistent results in relation to other auditorily conditioned responses established either in waking or hypnotic states.
 - b. The failure of all attempts to establish an auditorily conditioned response in a susceptible subject rendered hypnotically deaf as a preliminary measure with ready establishment after restoration of hearing.
 - c. The failure to inhibit voluntarily in waking or trance states either the experimental conditioned response or those employed in the control studies.
6. Confirmation of experimental results was obtained by further work on two additional subjects, yielding comparable though not identical results.
7. Significant interrelationships were determined between the various auditory states induced during the experimental procedure and the subjects' subsequently hypnotically elicited recollections of the experience.

DISCUSSION OF RESULTS

COMMENT on the experimental findings, as in the preceding clinical section of this paper, requires the same orientation to the general question of the identity of *being unconscious of a sound and failure to respond to a sound*. The experimental findings with the conditioned response technique indicate that, in addition to failure of response, there was an actual failure to receive stimuli sufficiently either to establish the neurological process of conditioning or to activate such a neurological process already established.

However, when it is considered that a conditioned response may be established and evoked without there being a conscious awareness of the conditioning stimulus, the question arises: Is conscious awareness itself an essential element in evoking a conditioned response based on a conditioning stimulus for which there was a conscious awareness? Hence, before any conclusion can be drawn from these experimental findings concerning the identity of being unconscious of a sound and

failure to respond to a sound, provision must be made for the possible alteration of the stimulus complex by the loss of the secondary attribute of conscious awareness. Such loss might account for an inability to respond to the stimulus complex. On the other hand, the control investigations, as well as the failure of attempts in the experimental situation to build up a conditioned response not including the element of conscious awareness, indicate an actual failure to receive stimuli, not attributable to the loss of an element previously present in the stimulation. Accordingly, the experimental findings warrant the conclusion that, in addition to being unconscious of a sound, there was an actual change in the capacity to utilize sound stimuli if not an actual incapacity to receive them.

Additional comment is warranted by various of the secondary findings made, and these will be mentioned briefly as follows:

1. Subjective Recollections

No particular significance may be accorded the waking amnesia for trance events since such amnesia characteristically succeeds deep hypnosis. Likewise, the detailed recollection of the experience in response to hypnotic suggestion is an expected result. Nor is the persistent nonrecollection of the shoulder and wrist stimuli remarkable since properly they were only a small part of a total experience belonging to the training period and hence were not recognized as belonging to the experimental experience. Likewise, the assimilation of those stimuli as a part of their dream content illustrates a well-known phenomenon.

However, the peculiar omission of those parts of their recollections directly related to the periods of deafness, coupled with the marked change in appearance and the spontaneous development of deafness, does constitute an item of interest. One may speculate upon the possibility of different levels of cerebration, with suggested deafness causing functioning at a level different from that serving for ordinary deep hypnotic sleep. Contrary to this, the continuance of the dream without actual interruption suggests only a problem of accessibility rather than different levels of functioning. In brief, the findings are suggestive of a type of conditioning in which the accessibility of certain experiences apparently depends upon remotely related but closely associated factors. At all events, this peculiar amnesia indicates extensive changes in the subject governing and limiting voluntary responsive behavior.

2. Other Conditioned Responses

Although the experiment was centered primarily around a single conditioned response, various others of a more indirect character became evident. The induction of deafness or the restoration of hearing was in essence a conditioning, the closing of the hands at each utterance of the word "shock" illustrates another type of conditioned response, the physical and psychological changes in recounting completely the experiences of the deaf periods represent another type, and the limitation of utterances to the word "shock" while recounting the events of the deaf period and showing the associated physical changes constitutes still another variety of conditioning. Aside from the interest which each of these possesses, their consistency and invariability in this experiment implies a highly organized pattern of behavior in the subject dependent upon many unrecognized factors.

3. Subjective Experience of Shock

The belief of the subjects that a shock had been delivered when only the buzzer had been sounded during the early control procedures raises a difficult question. That the sensory experiences of the shock were conditioned by the buzzer, with this conditioning showing the characteristic processes of experimental extinction and of restoration after a rest period, is a possible explanation. The rapid development of an ability to discriminate between delivery and nondelivery of shocks after combined stimulation suggests the corrective effect of waking awareness, an effect not possible in the hypnotic trance as was evidenced by the unfailing recollection in this state of all stimuli as including a shock. The appearance of such a corrective influence in the waking state suggests another difference in the neuropsychic organization between the waking and the hypnotic states.

4. Ideomotor Activity

Throughout the whole post-experimental investigation, extensive ideomotor processes were consistently present. The entire recollection of the trance experience was given in the form of a re-enactment and reliving of the experience. Similarly, the recounting of the dream content as a psychic experience included innumerable complex motor components. The immediate inference to be derived from the spontaneous development of such extensive ideomotor processes is that the entire course of experimental events constituted a valid and vital experience for the subjects. In consequence of this validity, there derived extensive ideomotor processes directly attributable to significant changes in the neuropsychic organization.

The findings of this investigation, both clinical and experimental, disclose that the induction of a state of hypnotic deafness results in significant and extensive psychological and neurophysiological changes in auditory functioning comparable in degree and character with those arising from organic deafness. These alterations of hearing are both subjective and objective in character, and range from slight impairment of hearing to total deafness, as evidenced by failure of natural organic responses to auditory stimuli. The findings, although showing differences as well as absolute similarities from subject to subject, are entirely consistent within themselves and with each other, and are illustrative of established psychological and physiological processes.

Experimental Demonstrations of the Psychopathology of Everyday Life*

THE EXPERIMENTS REPORTED BELOW were conducted for the most part in a graduate seminar held in New Haven under the leadership of Dr. Sapir during the spring of 1933; a few experiments which were performed elsewhere are included.

The subject who was used for many of these demonstrations had frequently before volunteered for similar purposes. He knew nothing of the plans for these experiments; they represented situations which were entirely new and problems with which he had never before been confronted. In his approach to such demonstrations, this subject customarily reacted in a way which was fairly characteristic for many others. Ahead of time, he often appeared to be resentful and anxious, or overeager about the impression which he and the experimenter would make. However, with the beginning of the lecture or demonstration, he would shift the responsibility completely on to the writer and lapse into an attitude of complete comfort with loss of all tension and worry.

I. UNCONSCIOUS DETERMINANTS OF THE CASUAL CONTENT OF CONVERSATION

THE SUBJECT was brought into a state of profound hypnosis during which he was instructed that, after awakening, he would (1) notice Dr. D. searching vainly through his pockets for a package of cigarettes; (2) he then would proffer his own pack, and (3) Dr. D. absent-mindedly would forget to return the cigarettes whereupon the subject would feel very eager to recover them because he had no others. He was further told that (4) he would be too courteous to ask for the cigarettes either directly or indirectly but that (5) he would engage in a conversation that would cover any topic except cigarettes although at the time his desire for the return of the cigarettes would be on his mind constantly.

When he was awakened the subject saw that Dr. D. was looking for cigarettes. He thereupon courteously offered his own and at the same time became involved in a conversation during which Dr. D., after lighting the cigarette, absent-mindedly placed the pack in his own pocket. The subject noted this with a quick glance, felt of his own pockets in a somewhat furtive manner as if to see whether or not he had another pack, and showed by his facial expression that he had no others. He then began chatting casually, wandering from one topic to another, always mentioning in some indirect but relevant fashion the word "smoking." For example, he talked about a boat on the bay at New Haven, commenting on the fact that the sight of water always made him thirsty, as did smoking. He then told a story about how the dromedary got one hump and the *camel* two. When the question of travel was raised, he immediately pictured the pleasure he would derive from crossing the Sahara Desert rocking back and forth comfortably on a *camel*. Next he told a tale

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of Syrian folklore in which again a *camel* played a role. When he was asked to tell something interesting about patients, he told of taking a patient to see a marathon dance which the latter enjoyed immensely while he himself was reminded by the antics of the dancers of a circus where one would see elephants, hippopotami and *camels*. Asked what he would like to do, he commented on the pleasant weather and said that there was nothing more glorious than paddling in a canoe or floating at ease on the water, smoking.

II. MANIFESTATIONS OF UNCONSCIOUS AMBIVALENT FEELINGS IN CONVERSATION ABOUT A PERSON

DURING HYPNOSIS, the subject was told that he admired and respected Dr. D. very much but that unconsciously he was jealous of him, and that because of this jealousy, there would be a cutting edge to complimentary remarks which he would make. He was further told that after awakening, a conversation would be started with Dr. D. in which he would take part. The subject was then awakened and the conversation begun.

The topic of traveling and its contribution to personal education was mentioned. The subject immediately brought up the fact that Dr. D. had studied both in the Middle West and in the East and that, having traveled abroad as well, he might well be called cosmopolitan. He himself, he added, would like to travel and get a cosmopolitan education but, in the last analysis, that was what was being done by any old tramp who traveled from one part of the country to another by stealing rides on freight cars. There followed a discussion of human behavior as it reflected local environments during which the subject remarked that the man who had traveled showed a broader knowledge and better understanding of people and of cultural things; he added, however, that the same thing might possibly be said of any resident of east-side New York.

III. LAPUS LINGuae AND UNCONSCIOUS DRONY

DURING HYPNOSIS, the subject was instructed that, after he awakened, Dr. D. would begin talking to him about some abstruse subject in which he was not at all interested, and that although he would actually be profoundly bored, he would try to appear interested. He was told that he would want very much to close the conversation, would wish for some way of shutting off this interminable flow of words, would look around him in the hope of finding some distraction, and would feel that Dr. D. was terribly tiresome. He was then awakened, whereupon Dr. D. began the conversation. Although the subject appeared to be politely attentive, Dr. D. would occasionally say, "Perhaps you're not interested." The subject would reply with excessive emphasis, "Oh, yes, certainly, I'm very much interested." Now and then he would interrupt Dr. D., trying to pin him down to some definite point for discussion, but each time this effort was evaded. At length, the subject began glancing about the room and was noted casually to observe an open door. Finally he interrupted Dr. D., saying, "Excuse me, I feel an awful draft," and got up to close the door. As he did so he was asked what he was doing. He replied, "The air seems to be awful hot ['hot air!']; I thought I would shut off the draft." When the hypnotist pretended not to understand and asked him what he was doing, the sub-

ject replied, "Why, *I just shut the bore.*" His remark was then repeated by the hypnotist for the benefit of those in the audience who had not heard it. When the subject heard his statement given as "shutting the bore," he started visibly, seemed tremendously embarrassed, and with much urgency turned to Dr. D. saying, "Did I say that? I didn't mean that. I just meant I closed the door." He was very apologetic in his whole manner and bearing.

IV. UNCONSCIOUS RESENTMENT EXPRESSING ITSELF IN MASKED FORMS THROUGH A SMOKE SCREEN OF OVERCOMPENSATORY COURTESY

THE SUBJECT WAS TOLD during hypnosis that he felt antagonistic, resentful and jealous of Dr. D., and that this emotional state would persist after he was awakened. He was also told that, after awakening, he would try to be courteous and acquiescent toward Dr. D. in every way and would appear to be willing to do anything requested of him.

After being awakened, the subject seemed to be entirely at ease; he responded courteously to some casual remarks addressed to him by Dr. D. Presently, Dr. D. asked him if he would mind changing his seat. The subject replied certainly not, that he would be delighted, but that *he* was quite comfortable where he was; if, however, it would make Dr. D. more comfortable, he would be delighted to change his seat. The request was repeated, whereupon the subject arose and asked Dr. D. to designate the precise chair in which he was to seat himself. He walked over towards the designated chair but asked Dr. D. if perhaps a certain other chair might not serve even better since the reason Dr. D. had given for his request was that he was not quite in full view of the audience. When Dr. D. insisted that the designated chair was the better one, the subject, with great courtesy, still questioned, seeming nevertheless most willing to do precisely what was desired and to be hesitant only about seating himself before he was absolutely certain of Dr. D.'s wishes. After much insistence by Dr. D. that he seat himself, the subject agreed that the chair indicated was precisely the one that he ought to sit in and proceeded to do so; but as he did so, he moved the chair about six inches to one side and shifted its position so that it faced in a slightly different direction. Immediately upon seating himself he turned politely and asked, "Is this the way you would like to have me?" After a few moments of casual conversation, Dr. D. found fault with his position and asked him if he would mind taking his original chair. He rose promptly, said that he would be delighted to sit anywhere that Dr. D. wished but that perhaps it would be better if he sat on the table, and offered to move the designated chair to any desired spot, suggesting some clearly unsuitable positions; finally, when urged insistently to sit in the chair he again had to move it.

V. AMBIVALENCE: MANIFESTATIONS OF UNCONSCIOUS CONFLICT ABOUT SMOKING IN THE DISTORTION OF SIMPLE, DAILY SMOKING HABITS

DURING PROFOUND HYPNOSIS, the subject was instructed to feel that he wanted to get over the habit of smoking but that he felt it was too strong a habit to break, that he would be very reluctant to smoke and would give anything not to smoke,

but that he would find himself compelled to smoke; and that after he was awakened, he would experience all these feelings.

After he was awakened, the subject was drawn into a casual conversation with the hypnotist who, lighting one himself, offered him a cigarette. The subject waved it aside with the explanation that he had his own and that he preferred Camels and promptly began to reach for his own pack. Instead of looking in his customary pocket however, he seemed to forget where he carried his cigarettes and searched fruitlessly through all of his other pockets with a gradually increasing concern. Finally, after having sought them repeatedly in all other pockets, he located his cigarettes in their usual place. He took them out, engaged in a brief conversation as he dallied with the pack, and then began a search for matches which he failed to find. During his search for matches, he replaced the cigarettes in his pocket and began using both hands, finally locating the matches in their usual pocket. Having done this, he now began using both hands to search for his cigarettes. He finally located them but then found that he had once more misplaced his matches. This time he kept his cigarettes in hand while attempting to relocate the matches. He then placed a cigarette in his mouth and struck a match. As he struck it, however, he began a conversation which so engrossed him that he forgot the match and allowed it to burn his fingertips whereupon, with a grimace of pain, he tossed it in the ash tray. Immediately, he took another match, but again introduced a diverting topic by asking the audience in a humorous fashion if they knew the "Scotch" way of lighting a cigarette. As interest was shown, he carefully split the match through the middle. One half of the match he replaced in his pocket in a time-consuming manner and tried to light his cigarette with the other half. When it gave too feeble a flame, he discarded it and had to search for the second half. After striking this, another interesting topic of conversation developed and again he burned his fingers before he made use of it. He apologized for his failure to demonstrate the "Scotch" light successfully and repeated the performance, this time holding the flame in such a way as to ignite only a small corner of the cigarette from which he succeeded in getting only one satisfactory puff. Then he tossed the match away and tipped the cigarette up so that he could see the lighted end. He started to explain that that was how the "Scotch" light was obtained and noted that only one small corner of the cigarette was lit. He smiled in a semi-apologetic manner and explained that he had really given a "Jewish" light to the cigarette, whereupon the lighted corner expired. He made a few more humorous comments, and as he talked and gesticulated appropriately, he rolled the cigarette between his fingers in such a fashion that he broke it, whereupon he put it aside and took another. This time, a member of the audience stepped up and proffered him a light, but as the lighted match drew near to the tip of his cigarette the subject sneezed and blew it out. He apologized again and said he thought he would light his own cigarette. While taking out his matches, he commented on the vaudeville trick of rolling cigars from one corner of the mouth to the other and proceeded to demonstrate how he could roll a cigarette in that fashion, which he did fairly successfully. However, in doing so he macerated the tip of the cigarette and had to discard it. He took another, holding it in his mouth while he reached for his matches, started a conversation, and took the cigarette out so that he could talk more freely. It was observed that he took the cigarette out with his hand in the reverse position to that which he usually

used, and after completing his remarks he put the dry end of the cigarette in his mouth, exposing the wet end. He then tried to light this, held the match to the tip in the proper fashion, puffed vigorously, finally got a puff of smoke and then blew out the match. Naturally, the wet end of the cigarette did not burn satisfactorily and quickly went out. He looked at it in amazement and in a semi-embarrassed manner mumbled that he had lit the wrong end of the cigarette; he then commented that now both ends of the cigarette were wet, and discarded it for another. After several similar trials, he finally succeeded in lighting the cigarette. It was observed that although he took deep puffs, he tended to let his cigarette burn undisturbed, and that instead of smoking it down to a reasonable butt, he quickly discarded it.

A little later while smoking, the subject attempted to demonstrate the violent gestures of a patient and in so doing knocked off the burning tip. Then while lighting another cigarette he became so interested in talking that he lit the cigarette in the middle rather than at the tip and had to discard it. As usual he showed profound embarrassment at seeming so awkward.

(On other occasions when the subject had demonstrated this phenomenon, he would finally complete the demonstration by selecting a cigarette in a strained and laborious fashion and then, obviously centering all of his attention upon the procedure of lighting it, would hold his hand tensely as he lit the match, applying it with noticeable rigidity to the cigarette and holding it there so long and puffing so repeatedly that all doubt was removed concerning the actual lighting of the cigarette, whereupon his whole manner and attitude would relax and he would appear to be physically comfortable.)

VI. UNCONSCIOUS CONVICTIONS OF ABSURDITIES WITH RATIONALIZATION IN SUPPORT OF THE BELIEF IN THEM

DURING HYPNOSIS, the subject was instructed that he was about to be reminded by the hypnotist of something he had known for a long time, that he had known it both as a result of his own experience and from reading about it in authoritative books. This, he was told, was the fact that "all German men marry women who are two inches taller than they are." A state of absolute emotional and intellectual belief in this was suggested and he was warned that he might be called upon to defend this statement. He was told that he had read of this in a book written by Dr. Sapir in which the reference occurred on page 42. He was informed that he would know this not only in the hypnotic state but also when awake. The subject was then awakened.

During the course of casual conversation, mention was made of the peculiar customs of various nations and peoples. Remarking that he was reminded of a peculiar custom among the Germans, the subject went on to describe the suggested phenomenon in a matter-of-fact way. When this statement was challenged, he expressed obvious surprise that anybody should doubt it. He argued that it was entirely reasonable, that customs established originally from some simple purpose could be perpetuated by future generations until, regardless of their absurdity, they were looked upon as rational and commonplace. From this statement, he proceeded to draw a social parallel to the attitude of Mussolini regarding

compulsory marriage, arguing in a logical, orderly and reasonable fashion. When this failed to convince the doubters, he drew upon personal experience, citing examples with a casual, simple, matter-of-fact and convincing manner, and calling upon others in the group to verify his statements. When they failed to do so and cited contrary instances he smiled agreeably and stated that every rule had its exception and that the failure of the German in the audience to confirm his observation was characteristic of the well-known tendency to overlook the obvious in familiar situations. When he was asked whether any authority in the field was known to hold such a belief, he promptly stated that he had read the same observation in a book by Dr. Sapir entitled Primitive Peoples and Customs. When he was asked where in the book it was described, he smiled in a deprecating fashion and remarked that it had been so long since he had read the book that he could not be sure of the page but that, as he recalled it, it seemed to be between pages 40 and 45—44, perhaps; this despite the fact that the hypnotist had specified page 42. He was then asked by a member of the audience what chapter it was in; he stated that as far as he recalled, it was chapter 2. Asked for the chapter heading, he explained that he had read the book so long ago he really could not recall it. When a member of the audience than stated that such a belief was contrary to all common sense, the subject, in amazement and with some embarrassment, asked rather urgently, "Surely you would not dispute a man as famous and distinguished as Dr. Sapir?" nodding his head toward Dr. Sapir. His whole manner was suggestive of intense surprise at such arrogant disbelief.

VII. AUTOMATIC WRITING: UNCONSCIOUS OBLITERATION OF VISUAL IMPRESSIONS IN ORDER TO PRESERVE AN HYPNOTICALLY ORDERED AMNESIA

DURING HYPNOSIS, the subject was instructed that, on awakening, he would engage in a casual conversation and that, as he did so, his hand would begin writing but that he would have no knowledge of what he was doing.

After he had written some incomplete sentences, he was asked what he was doing by others in the audience. With some amazement, he explained that he had been talking to Dr. D. When he was informed that, while talking to Dr. D., he had also been writing, he immediately pointed out that this could not have been since he had been holding a cigarette in his right hand. (He had actually transferred the cigarette from his left to the right hand upon completing the writing.) As the audience continued to insist, he pointed out that he had had no pencil and nothing to write on, in addition to the fact that he knew he had not been writing and that the audience must have been mistaken. His attention was then called to a pencil and some paper on the table; he seemed surprised to see the paper and pencil and insisted that he had not had anything to do with either. He was asked to examine the paper to see if there were not some automatic writing on it, or at least writing. He picked up the paper, glanced at the top sheet, shook his head and began slowly to thumb over each sheet, examining the papers over and over again on both sides, and finally restoring the pile to its original state. He said that he found no writing on any of the sheets. His attention was called to the top sheet which he was asked to examine. He looked it over carefully at the top, turned it over and examined it, seemed to be in doubt as to whether or not he

had taken the top sheet and took the second sheet; he examined that, put it away, and glanced at the third sheet; he then seemed to feel that possibly he had had the top sheet in his hand, so he reexamined that very thoroughly and carefully and then, still holding it right side up, declared hesitantly, as if he hated to dispute with the audience but felt compelled to disagree, that there was no writing on the paper. One of the audience called his attention to the particular part of the paper on which there was writing. He glanced at it, looked back at his informant in a puzzled way and then reexamined that part of the paper. After turning it over somewhat doubtfully and glancing at it, he turned it right side up again. He then began holding it so that the light struck it obliquely and finally declared, still in a puzzled fashion, that there really was no writing on the paper. Finally, he was given the suggestion by the hypnotist that there was writing and that he would see it. He glanced back at the paper in surprise and then an expression of amusement and amazement spread over his face as he saw the writing apparently for the first time. He commented on the juvenility of the handwriting, disowning it. When asked to tell what it said, he showed much interest in reading the characters but appeared to have a certain amount of difficulty in deciphering the writing. The last word was incomplete; he read it, spelled it, and stated that it seemed to be only part of a word. When he was asked to guess what the word was, he promptly reread the sentence in order to get the context, but was unable to guess. He then wanted to know why the writing had not been finished and was informed by the hypnotist that if he would just watch the pencil on the table it would suddenly lift up in the air and begin writing the rest of the word. He looked doubtfully at the hypnotist and then said, "Why, it's lifting up," seeming to have no realization that his own hand was picking up the pencil and holding it poised in position to write. Gradually his hand began forming letters. He was asked what the pencil was writing, to which he replied, "Wait—wait; let's see;" he appeared to be entirely absorbed in the supposed phenomenon of a pencil writing alone. The hypnotist watched the writing, which was proceeding very slowly, and soon realized that the word in question was "delicious." The hypnotist then announced this to the audience while the subject was writing the last four letters and finished by the time the subject had finished writing. The subject looked up upon completing the word and said, "It's delicious," and then read the sentence to see if the word was relevant to the meaning. Apparently, he had not heard the observer announce the word to the seminar.

VIII "CRYSTAL" GAZING: HALLUCINATORY VIVIDNESS OF DREAM IMAGERY EMBODYING ANGER DISPLACED FROM HYPNOTIST ON TO DREAM PERSON

IN A SOMNAMBULISTIC STATE, the subject was instructed that he was to gaze at the wall and that, as he did this, the wall would become distant, far-away, foggy and blurred, and that gradually a dark point would appear which would become more and more elaborate, that movement would enter the scene and that soon he would see a well-known and emotionally stirring moving picture.

The subject began these observations with faint interest and considerable difficulty at first but gradually a profound change in his manner and attitude occurred as he was seen to watch the moving images with intense interest. He resented any

inquiries as to what he was seeing and gave the impression that he did not want to be distracted from the scene. Now and then, he would turn slightly to ask, "Did you see that? Watch."—The moving scene was from Rasputin and the Empress, showing the stumbling and falling of the Czarevitch, to which the subject showed appropriate emotional reactions. He went on to describe the sequence of events in proper chronological order. When the demonstration had gone far enough, he was told that the picture was changing. He disregarded this; when the hypnotist insisted, he declared that he did not want to listen now, that the hypnotist should wait until the picture came to an end. He was obdurate about accepting any suggestions concerning the changing of the picture. The suggestion was then tried of speeding up the movie, making it go faster and faster. When this was done, it was possible to shift the scene to a hospital picture which he described as one in which a nurse shouted loudly at a patient. Here he manifested great resentment toward the nurse for doing this, apparently hallucinating the nurse's voice. The incorporation into the hallucinatory image of his anger against the experimenter and the childlike and fear-laden exaggeration of his impression of loud and angry voices because of his own inner anger were all very evident.

IX. IMPLANTATION OF A COMPLEX

DURING HYPNOSIS, the subject was instructed to recall having had dinner at Dr. D.'s home on the previous day. He was then told that the hypnotist would review a certain series of actions which had occurred on the previous day, and that the hypnotist would refresh his memory of certain things that the subject had done which he regretted intensely and which constituted a source of much shame to him. Thereupon, he was told to remember how, during the course of the afternoon, he had stood by the fireplace, leaning against the mantel while talking to Dr. D. about various subjects, when his eye happened to fall upon a package of cigarettes lying behind the clock on the end of the mantelpiece. The tale went on that Dr. D. had noticed his glance and had proceeded to tell the subject that the package of cigarettes was a sentimental keepsake of his marriage, that he and his wife had received this package of cigarettes on their wedding day and had preserved it unused ever since. As Dr. D. added various romantic elaborations, the subject had not paid much attention because he was really rather bored by the sentimental story. After fingering the package, Dr. D. had replaced it at the other end of the mantelpiece; but the subject had not paid any attention to this either.

Shortly after this, Dr. D. and his wife had left the room for a few minutes. During their absence, the subject noticed that he was out of cigarettes and glanced about the room to see if his host had some. Noticing a pack of cigarettes at the other end of the mantelpiece, he thought that his host would have no objections to his helping himself. He stepped over and took this pack of cigarettes from the mantelpiece, opened it, extracted a cigarette, lit and smoked it. Not until he had finished smoking did he realize that this was the very pack of cigarettes which Dr. D. had placed at the end of the mantelpiece instead of returning to its original hiding place behind the clock. The subject was then reminded of how distressed he had felt, of his sense of being in a quandary as to what he ought to do, of how he had hastily closed the pack and had replaced it behind the clock and had

then decided that he had better put it where Dr. D. had placed it, but how before he could do this, his host had returned so that he had been forced to carry on a casual conversation with this burden on his mind. Furthermore he was told that even now and after awakening, this burden would still be on his mind.

The subject was roused and after a few brief remarks, Dr. D. offered him a cigarette. The subject started, glanced furtively first at Dr. D. and then at the hypnotist and finally in a labored fashion reached out and accepted the cigarette, handling it in a gingerly manner. Dr. D. began an innocuous conversation, but the subject paid little attention to what was said and asked Dr. D. what he thought about sentimentality, uttering the word "sentimentality" in a tone of disgust. He then stated that he himself was not sentimental and that he tended to dislike people who were sentimental and maudlin. He stated that he hoped that Dr. D. was not sentimental, that he did not impress the subject as being sentimental. Dr. D. made another attempt to change the topic of conversation but the subject persisted with his own line of thought. He raised a hypothetical question about a man who owned an old homestead and who, as a result of the economic depression, had lost much money and was in a quandary about the necessity of selling it. He went on to talk of the burning of the house, of the house going up in smoke, and various allied topics. He then talked of guilt feelings, how everybody stole, now he himself had stolen; he wanted to know how Dr. D. would feel about anybody who had stolen unwittingly.

Another attempt by Dr. D. to change the trend of the conversation failed. The subject then told of having once stolen a cigar which belonged to a man who had kept it for sentimental reasons. He said he had taken the cigar and smoked it without realizing that it was a keepsake, and that he had felt very badly about it and wondered about the possibility of replacing it so that the sentimental man would not be angry with him. In a defensive manner, he then expressed a high regard for a person's feelings and contended that, nevertheless, people should not think too hard of others who had unwittingly violated some of their sentimental values. After this, he stated that not only had he stolen the cigar but he had even stolen cigarettes (pause) a pack of cigarettes. As he said this, he glanced in a particularly furtive manner at Dr. D. and also at the hypnotist, and seemed very ill at ease. He told about having smoked a cigarette and having enjoyed it, but that it had left a bad taste in his mouth afterwards and that, even though he had stolen the cigarettes long ago, he could not get them off his mind, that they still troubled him though common sense told him it was nothing to be concerned or worried about.

X. THE ASSUMPTION OF ANOTHER'S IDENTITY UNDER HYPNOTIC DIRECTION, WITH STRIKING UNCONSCIOUS MIMICRY AND THE ASSUMPTION OF UNCONSCIOUS EMOTIONAL ATTITUDES

DURING HYPNOSIS, the subject was informed that, after awakening, he would be Dr. D. and that Dr. D. would be Mr. Blank, and that in the role of Dr. D., he would talk to the pseudo-Mr. Blank. Additional suggestions which the subject fully accepted were given to complete the transidentification. After the subject was awakened, a conversation was begun. The pseudo-Mr. Blank questioned him about

his work in the seminar, as though he were Dr. D.; the subject responded by giving an excellent talk about his experiences in the seminar and his reactions to the group, talking in the phraseology of Dr. D. and expressing the personal attitudes of Dr. D. A chance conversation with Dr. D. on the previous day had supplied him with a great deal of information which he utilized fully. It was noted also that he adopted Dr. D.'s mannerisms in smoking and that he introduced ideas with certain phrases characteristic of Dr. D. When the pseudo-Mr. Blank challenged his identity, the subject contradicted "Mr. Blank" politely and seemed profoundly amazed at Mr. Blank's remarks. Then suddenly, with an expression of dawning understanding, he turned to the hypnotist saying "He's in a trance, isn't he?," and thereafter was only amused at "Mr. Blank's" remarks. "Mr. Blank" then questioned the subject about his "wife," to which the subject responded in a way that would have been natural for the real Dr. D. When asked about children, he assumed an expression of mild embarrassment and replied, "not yet, but you never can tell." "Mr. Blank" then began talking to the hypnotist in his ordinary fashion, at which the subject again seemed tremendously surprised. With a puzzled look on his face, he suddenly leaned over and tested "Mr. Blank" for catalepsy. When he found none, his face was expressive of some concern; he promptly whispered to the hypnotist, "He's coming out of the trance," but was relieved when the hypnotist assured him that it would be all right if this happened.

Finally, when an attempt was made to rehypnotize him in order to restore his own identity, the subject displayed the emotional attitude of resistance towards the induction of hypnosis which would have been entirely characteristic of the real Dr. D. The subject seemed actually to experience the same emotional responses that Dr. D. would have had at such a time. Finally, because he appeared to be entirely resistive to simple suggestion, it was necessary to induce hypnosis by indirect methods.

This rather astonishing result offers a technique for the experimental investigation of the phenomena of identification, and of the unconscious incorporation of parental emotions by children.

The Hypnotic Induction of Hallucinatory Color Vision Followed by Pseudonegative After-Images*

PREVIOUS EXPERIMENTATION on the induction by hypnosis of various hallucinatory phenomena suggested the possibility of inducing hallucinatory color vision. Accordingly, an experiment was devised involving the hallucination of the colors red, green, yellow and blue in response to direct hypnotic suggestion, followed by the spontaneous hallucination by the subjects of the complement of each of these colors in a fashion comparable to the development of negative after-images.

The experiment was conducted on five university freshman, selected from among commerce and engineering students, all of whom had been used repeatedly for hypnotic work but not in connection with the hallucination of colors. In addition, they had been trained over a long period of time to develop exceedingly deep hypnotic traces, and for this experiment, from 30-45 minutes of continuous suggestion was given after a trance had been induced to insure a consistently profound hypnotic trance.

PROCEDURE

THE PROCEDURE EMPLOYED was comprised of the following steps:

1. The administration in the waking state of a word association test containing a hundred words, among which were "red," "green," "yellow," "blue" and "bright."
2. The induction of a profound somnambulistic trance and the administration of a second word association test, also containing a hundred words, some of which were common to the first list, and among which in a different order were the same critical words.
3. The giving of the following instructions while the subject continued in the deep hypnotic trance:

"I am going to show you, one at a time, sheets of colored paper. Each sheet is entirely of one solid color, and this color will be very bright. All of the sheets will be colored, but no two successive sheets will be of the same color. I will name the color of the first sheet, and you will name the color of the next sheet, and we will continue in this alternate fashion. As I name the color of the first sheet, you will look at it carefully until you see it plainly and clearly, just exactly as I have described it. Nod your head as soon as you see it plainly, and I will then put it out of sight in the left-hand drawer of the desk and take a new one from the right-hand drawer. As I show you this next sheet, you are to look at it carefully and tell me what color it is. It, too, will be of a single bright color,

*E. M. Erickson, *J. Exp. Psychol.*, 1938, 22, 581-588.

but a color different from the one I named. After you have named the color of your sheet, it will then be my turn to name the color of the next sheet, then your turn will come." These instructions were repeated several times to insure full comprehension.

4. The exhibition, one at a time, of 16 sheets of plain white typing paper. Of these, the eight alternate sheets were described by the experimenter in the following order as, "red," "yellow," "green," "blue," "green," "yellow," "red" and "blue," the adjective "bright" being added each time, while the subject was called upon to identify the eight intervening sheets as of some one bright color other than that just named by the experimenter.

5. The exhibition, as a control measure against the development of strong associative values between the complementary colors, of brightly hued red, yellow, blue and green sheets of paper. These sheets were presented in pairs, with each color paired with itself and with each of the other three colors, making a total of 16 pairings exhibited in random order. As these pairs were presented, the subject named the colors aloud.

6. The repetition of Step 4 followed by questioning of the subjects concerning the color intensity of the various sheets. Such questioning had been avoided previously because of the possible effect of suggestion.

7. The administration of the first word association test while the subject was still in the trance state.

8. The administration of the second word association test after awakening the subject.

9. Questioning concerning the definition of complementary colors, and the hazarding of guesses by the subjects when the definition of complementary colors had been given by the experimenter.

RESULTS

1. THE PRELIMINARY WORD association test disclosed no direct association of the various colors with their complements.

2. The exhibition for about 1-2 minutes each of the eight alternate sheets of white paper disclosed four of the five subjects as being fully capable of "hallucinating" in every instance the color specified by the experimenter. The fifth subject invariably saw only a white sheet of paper. Extensive hypnotic suggestion did not alter this behavior. Nevertheless, the entire experiment was performed on this subject.

3. The four subjects who hallucinated the specified color invariably declared the succeeding sheet to be of the appropriate complementary color. There were no failures, except those of the fifth subject.

4. The naming of the control pairs of colored sheets was done correctly by all five subjects.

5. The repetition of the experimental procedure yielded results identical with those first obtained.

6. Questioning of the subjects concerning the color intensity of the various sheets exhibited to them elicited the information that the sheets described by the experimenter were brightly hued but that the sheets described by them were "softer," "duller" and "nowhere near so bright."

7. The word association test given immediately after the experimental procedure, with the subjects in the trance state, yielded a total of nine instances of color associations. These were: red-brown; red-pink; yellow-orange; yellow-tan; yellow-green; blue-red; blue-purplish; yellow-blue and red-green. One of the two associations of complementary colors was given by the fifth subject.

8. The word association test given after awakening the subjects yielded only two color associations, neither of which was of complementary colors.

9. The post-experimental questioning of the subjects disclosed them to be unable to define or to name complementary colors when asked directly. When a definition had been given them, and they were asked to hazard guesses, their tendency was to contrast light and dark colors, such as pink and brown.

To sum up: Of the five hypnotized subjects employed, one failed completely to meet the test situation. The remaining four, in response to appropriate hypnotic suggestions, hallucinated as red, blue, green, or yellow the alternate sheets of white paper exhibited to them and invariably described the intervening white sheets as of the complementary color appropriate to the hallucinated color of the preceding sheet. The results obtained from the control procedures indicate clearly that the experimental findings derived directly from the procedure employed.

COMMENT

THE GENERAL LIMITATIONS of these findings coupled with the present inadequate understanding of color vision preclude any attempt at a theoretical elaboration of the results in relation to color vision and limit discussion to tentative suggestion of the processes by which these may have been achieved.

An immediate consideration is that of the role of the hypnosis employed. Although the hypnotic state constituted an integral part of the procedure, its role may safely be described as only one of providing a setting favorable to the performance of the experiment. Unquestionably, the experiment could be repeated in the waking state, but probably with less ease and effectiveness. Hence, in any analysis of the results, the question of hypnosis as such may properly be disregarded.

The next question concerns the character of the stimuli given to the subject. Obviously, the retinal stimulation by white paper did not enter directly into the situation except as a part of the experimental setting, although indirectly it may have had definite, though remote, significance. As for color stimuli, these were wholly auditory in character and were so given as to derive any significance entirely from the subject's experiential past. Hence, a definite statement may be made that the responses elicited arose primarily from activity of central processes, and that the entire problem thus becomes essentially one of central, rather than peripheral, processes and activities.

Two possible interpretations of the findings may be suggested. The first of these refers to purely psychological or associational processes. The experiencing of a color is ordinarily succeeded by a negative after-image. In consequence of this sequence of psychophysiological processes, there is established a direct association between their experiential aspects. Hence, stimuli serving to arouse directly the experiential values of a color would presumably serve to a somewhat lesser extent to arouse the experiential values of the associated negative after-image.

Since no actual color stimuli were given and since each of the four subjects who

entered into the experimental situation showed no failures for any of the 16 test instances, the assumption may be warranted that there is a direct associational bond between the experiential values of a color and its complement sufficiently strong to permit its evocation by purely psychological stimuli.

While this explanation constitutes a possible interpretation of the experimental findings, it is unquestionably far too simple. A second interpretation may be suggested; the inadequacies of our present understanding of color vision preclude more than a statement of possible factors.

First is the effect of the instruction to *see*. This instruction in itself, even if the subject had his eyes closed, would constitute an actual stimulus serving to arouse into activity various psychophysiological processes preliminary to vision and upon which visual activity could be based. But since the subjects actually did receive visual stimulation, though neutral in character so far as color vision was concerned, there was some actual visual activity, with a consequent augmentation of the psychophysiological processes involved in vision previously aroused by the nature of the situation.

The suggestion to see a specific color would serve to establish a certain "mental set," leading to the various preliminary psychophysiological processes upon which could be based the initiation of the actual activity of color vision, and which would be derived from the psychophysiological activities based upon past learning. Thus, the specifying of a definite color, while constituting a purely psychological stimulus, would stimulate various mental processes intimately related to the psychophysiological activity of vision already in progress, and these, in turn, would serve to reinforce each other.

Additionally, the naming of a specific color would stimulate into activity various mental processes related to the experiential values of the chosen color and these processes would also serve to augment the activity of the other processes already aroused.

Hence, although no visual color stimulus had been given, there would be active various psychophysiological and experimental processes, all of which would be intimately associated with each other and ordinarily contingent upon color stimulation of a particular character.

The character of the suggestions to see the specified color was also such as to create a state of tension in the subject compelling a response but limiting the possibility of a response strictly to the subject's own concept of color. Therefore, his response could derive only from his own experiential associations and learned activities. From this state of tension with its limitations, there could derive a process of control and direction of the various psychophysiological processes in activity leading to the color vision response normally contingent upon such processes.

Thus, in place of an actual color stimulus, there would be the interaction of these various processes, each serving to initiate further and more complete activity comparable to that of the actual processes of color vision, with the entire process culminating in an actual psychological response of color, the validity of which was clearly indicated by the ensuing subjective response of the complementary color.

When the subjects had made their response to the various psychophysiological processes aroused in them by the presentation of the stimulus sheet described as colored by the experimenter, there followed the withdrawal of this sheet and the presentation of a second sheet which they were to describe as colored. This with-

drawal and replacement of sheets constituted an actual stimulus for the cessation of the psychophysiological activity in progress, thereby initiating directly the re-adjustive activities consequent upon the cessation of psycho- and neurophysiological activity. Since the subjects invariably described the second sheet of each pair as of the correct complementary color, the assumption is warranted that re-adjustive processes and activities did occur and that these corresponded in character and degree to those consequent upon actual color vision, and were sufficiently diverse and strong as to permit a subjective response comparable to that deriving from a negative after-image.

CONCLUSION

EMPHASIS MUST BE PLACED entirely upon the factual findings rather than upon the attempted interpretations. The essential consideration of the experiment is that the hallucination of various colors was sufficiently valid subjectively to permit a spontaneous and invariable hallucination of complementary colors in the form of negative after-images.

Unquestionably, associational and neuro- and psychophysiological processes entered into the production of the phenomena, but not necessarily as has been suggested. Further development of the understanding of color vision is requisite for any adequate interpretation of the experimental findings, and hence, their significance must be restricted to their evidential values in relation to the importance of cortical processes in color vision.

The Induction of Color Blindness by a Technique of Hypnotic Suggestion*

PREVIOUS WORK on the induction by hypnotic techniques of deafness and of hallucinatory color vision with pseudo-negative after-images suggested the possibility of effecting other alterations of sensory functioning by hypnosis. An experiment was devised for the hypnotic induction of color blindness in subjects having normal color vision. Selected as a measure of color vision was the Ishihara *Color Blindness Test*, since it consists of plates of colored dots so arranged as to outline various numerals, the perception of which is directly dependent upon and limited to the actual degree of color discrimination present.

EXPERIMENTAL PROCEDURE

PRELIMINARY WORK soon disclosed that induced color blindness constituted so complex a phenomenon that a satisfactory and effective technique of suggestion would necessarily be more extensive and comprehensive than the simple, direct type of hypnotic suggestion usually employed in hypnotic experimentation. An adequate technique was therefore first developed on a pilot group of subjects who were subsequently dismissed.

A total of six new subjects, four female and two male, were used, of whom two were nurses, two occupational therapists, one a medical student and the other a hospital attendant. All were of normal or superior intelligence and were capable hypnotic subjects. None had had any previous acquaintance with the Ishihara Test and, for experimental reasons, no preliminary test was made of their color vision. The occupational therapists, however, were found afterwards to be acquainted with a wool-sorting test for color vision.

The experimental sessions were held in a well-lighted room. The plates were exhibited in a vertical position on a frame supporting them at the level of the subject's eyes, and at a distance of approximately 28 inches.

To acquaint the subject fully with the nature of the proposed task, cards similar to the test plates but bearing numerals out from a calendar were presented under test conditions and the subject required to read them aloud. Instruction was then given to read any other similar cards in a like fashion, without straining the eyes or staring hard, and with mention made promptly of any difficulty or uncertainty in reading.

The possibility of cues being given unconsciously to the subjects by the experimenter was minimized by the following features. First, the experimenter's own state of color blindness precluded his identification of the plates. Second, the cards which were labeled on the back with a distinguishing letter were shuffled face down. In presenting the cards, the subject was not permitted to see the distinguishing letter, and, with the exception of Plates 14, 15, and 16 which are read

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as having winding pathways, care was taken by the experimenter to avoid seeing the face of the card. The plates were relabeled for each experimental session to prevent any accidental association by the experimenter between a reply and a distinguishing letter.

The order of the suggestions of the various types of color blindness was random for each subject.

The actual experimental method evolved varied slightly in details from subject to subject, depending upon the order of suggestion of total, red, green, and red-green blindness. The essential steps in the procedure may be summarized briefly as follows:

1. The slow gradual induction of a profound somnambulistic hypnotic trance.
2. The induction by slow degrees of a state of "hypnotic blindness," this blindness to persist throughout the trance and post-hypnotically.
3. The awakening of the subject in this suggested blind state to permit the spontaneous development of affected distress and anxiety over the subjective visual loss.
4. The induction of a second trance during which the blindness was reinforced as a preliminary measure to the next step.
5. The explanation to the subjects that it was now proposed to alter this blindness by "restoring" vision in part, yet leaving a "limited" blindness which would preclude the seeing of a certain color or colors. All objects would be seen clearly, but the chosen color itself, which was directly specified, would not and could not be seen. Instead, while all objects might be seen, certain of them would appear in a new and unfamiliar guise, their appearance being one of a totally neutral color tone.
6. The induction of a profound amnesia, to ensue at once and to persist indefinitely, for the chosen critical color or colors which had been specified. In addition, there were given vague general instructions serving to effect an inclusion in the amnesia of all connotations and associations for that color, thereby rendering the name of the color either a nonsense syllable or a totally unfamiliar word.
7. The slow gradual "restoration" of vision accompanied by the giving of elaborate detailed suggestions. These were to the effect that soon everything would be clearly visible and yet vision would be incomplete. This incompleteness would derive from changes effected in the visual capacity by the induced blindness. These changes would cause things to be altered in hue, and while colors would seem to be normally bright and vivid, there would be more neutral tones. These neutral tones would serve to alter materially the appearance of familiar objects and this alteration would be of such character as to be indefinable. No mention was made in this step of the chosen color since, presumably, that had become a nonsense syllable for the subject. Neither was mention made up to this point, either directly or indirectly, of the Ishihara Test.
8. The administration, with the subject in the deep trance, of the Ishihara Test, exhibiting the cards in a different order for each session, with the exception of the sample card which was consistently shown first. This was followed by the administration of the test in a post-hypnotic somnambulistic state with the subject still under the influence of the hypnotic suggestion, and with the shuffling of the cards including the sample card.
9. The repetition in separate experimental sessions, usually several days or a

week apart, of the foregoing procedure for each suggested variety of color blindness.

10. The separate administration of the test by an associate and by the experimenter at later dates with the subject in the normal waking state and in the simple trance state.

11. An attempt to induce the subjects in the waking state to see figures other than those read previously in the normal waking state. Care was exercised to keep the conditions of exhibition of the cards standard so far as light, position, and angle of vision were concerned.

All 16 plates were used, and a total of 13 separate administrations of the test were made for each subject, only eight of which were actually experimental in character. Of these eight, four were made during the deep trance states and the remainder during the succeeding post-hypnotic somnambulistic states. Of the five remaining control administrations made subsequent to the experimental work with the subjects in the normal waking and in the simple trance states, two were given by the experimenter and these were repeated by an associate. The fifth control, actually requiring several administrations of the test, was the one in which an effort was made to force or to induce the subjects to see other or additional figures in the plates, or to fail to see those actually there.

EXPERIMENTAL FINDINGS*

THE CONTROL EXAMINATIONS disclosed normal color vision for all six subjects. However, one subject consistently read 71 for Plate 5, which is usually read as 74 by the normal, as 21 by the red-green blind, and with difficulty if at all by the totally color blind. No other evidences of color blindness were detected for this subject. Otherwise the reading of the plates by all the subjects was strictly in accord with the criteria of the test for normal color vision.

In the final control administration of the test, the subjects were asked to be certain of their previous readings of the plates. When each reading had been confirmed, instruction was given to the effect that the plates would be shown again. This time, they were told that, if the plates were scrutinized with great care, it would be possible to see *different numerals*, *additional numerals*, or even to *see the plates as having no numerals*, and they were admonished to exercise much effort to read the plates in an entirely new fashion. These instructions were repeated upon the exhibition of each plate.

As an additional control, the subjects were shown the cards briefly illuminated by red, blue, green, and yellow lights separately.† The test was then repeated under standard conditions after shuffling the cards. The subjects were unable to do more than confirm their previous normal responses. However, they were more confident in their statements about additional numerals.

Essentially, this control procedure disclosed that, while the subjects could be induced to see more on the card than was usually perceived, *the process was essentially one of addition to the normal perception or direct subtraction from it* without there being any change or substitution or alteration of perceptual values. Hence, these findings may be summarized by the statement that, even under pres-

*For the sake of brevity, certain details and much tabular material to be found in the original article have been deleted. This material is not essential for the reading of this article.

†This procedure caused the hidden figures to become visible.

sure to read the plates in a new or different fashion, the subjects continued to read them in the previous normal fashion, and the slight evidence obtained in some instances of an ability to detect other possible readings disclosed the subjects as unable to attach a clear perceptual validity to the new readings.

The response obtained for the trance state and for the post-hypnotic somnambulistic state were essentially identical. Occasionally, a subject would be slightly more certain of his readings in one state than in the other, but there was no reliable difference.

The hypnotic suggestion of various types of color blindness was found to induce consistent deficiencies in color vision comparable in degree and character with those found in actual color blindness.*

The extent of the induced color vision defect for the various types of suggested color blindness was progressively greater in the following order: green, red, red-green, and total color blindness. The proportion of normal color vision responses out of a possible 60 were respectively, for the suggested green, red, red-green, and total color blindness, 30, 17, 6, and 4, and the number of definitely color-blind responses not possible ordinarily for the subjects were respectively 44, 54, 84, and 73 (the lower numerical value of this last figure is a function of the test itself and derives from its significant limitations for total color blindness).†

COMMENT

1. General Considerations

Mention will first be made of the subjective reactions manifested during and after each experimental session. These reactions were essentially the same in character for all subjects though not always of the same degree from subject to subject or from session to session. They may be summarized as complaints of extreme fatigue, muscular stiffness, and severe headaches, following each experimental session. Frequently during the experiment, it became necessary to allow a rest period between the trance and the post-hypnotic states, during which the subjects merely rested quietly in the hypnotic sleep. There were, however, no observable manifestations of these symptoms during trance states other than the verbal complaints which were elicited only upon direct inquiry. In the waking state, complaints were offered spontaneously. After each session, all of the subjects were most curious to know what sort of strenuous physical exercise they had been given in the trance which could account for the general muscular stiffness, intense fatigue, and throbbing headaches. These reactions are suggestive of profound neurophysiological responses to the hypnotic suggestions.

Another preliminary consideration is the type or character of the hypnotic trance used, since in all probability, the slowly induced, exceedingly profound trances employed in this experiment contributed greatly to the results obtained. An average of eight hours was spent in the initial training procedures for each subject. This time was devoted entirely to the task of teaching them to sleep soundly,

*For details of the actual responses see the original article.

†See the original article for additional information on the actual responses.

stuporously, and to develop profound somnambulistic states. *Not until this had been done was any attempt made to induce other hypnotic phenomena or to use the subjects for investigatory purposes.*

It is only by such laborious measures that there can be secured a sound, psychologically consistent and effective hypnotic trance of a character permitting the acceptance and execution of complicated and difficult suggestions. The ordinary deep trance, rapidly induced, with the subject given direct and emphatic suggestions does not permit the gradual and effective development of what may be called the "mental set" which is requisite for the execution of complicated behavior free from the influence of waking patterns of response. Once adequately trained, the subject can be hypnotized quickly and deeply; but a slow induction extending over 15-30 minutes is desirable for difficult experimental work. Apparently the element of time is an important factor in securing a neuropsychological state which will permit the subject to accept and act upon a suggestion freely and completely and without inhibitions and limitations deriving from customary waking habits and patterns of behavior.

One may suppose here that the deep trance and the lapse of time permit a quiescence or a general state of mental inertia to develop such that when a hypnotic suggestion is given, it serves only to arouse those mental processes immediately involved. In this way, apparently, the hypnotic task can be approached by the subject as a new experience uninfluenced by past experiences and their derivatives.

Concerning the rationale of the varied hypnotic instructions given to the experimental subjects, certain explanations are warranted to clarify their extent and character. As was discovered early in the preliminary clinical experimentation, direct suggestions of color blindness were ineffectual since they were at absolute variance with the subject's intellectual grasp of reality and thus in utter conflict with the established products of past learning and experience. In addition, such direct suggestions required the subject to differentiate between *what was to be seen* and *what was not to be seen*, a differentiation possible only if *all were seen*. These two serious obstacles resulted either in a failure to accept suggestions, or, if they were accepted, in a negation of seeing which did not constitute color blindness.

Hence, the problem became one of circumventing these difficulties. This could be done, presumably, by creating a psychological situation which would permit an approximation of an actual state of color blindness, in which intellectual conflicts could not arise about the existence or nonexistence of colors, and in which full vision could obtain without a need either to differentiate between colors or to avoid seeing colors.

The solution of this problem was attempted by first suggesting total blindness, intellectually an entirely conceivable state, and causing to develop in the subject a strong unpleasant affective reaction. This in turn would lead to a ready acceptance of any suggestion affording relief from the emotional distress of subjective blindness made indirectly and unnoticeably conditional upon the acceptance of direct suggestions of color blindness. Any critical intellectual tendencies would be held completely in abeyance by inner forces deriving from the emotional needs of the subject, these affective needs compelling the subject to accept color blindness suggestions in full as the only means of securing affective comfort. Hence, there could develop neither the occasion nor any need to bring about an adjustment between the critical faculties and the suggestions of color blindness, since the sub-

ject's primary purpose and object became the seeking of affective satisfactions and the consideration of an intellectual problem. Thus, the color-blindness suggestions became possessed of legitimate and essential values for the subject, enforcing their acceptance.

Having secured the acceptance of the suggestions of color blindness as an integral part of the satisfaction of significant affective needs, the next step lay in the development of a mental state approximating that of the color-blind person to whom colors are nonexistent as perceptions, require no differentiation from each other and have no direct associations or connotations. To develop this mental state, an extensive amnesia was suggested for the chosen color or colors together with all color associations and connotations. Such an amnesia is, in itself, entirely acceptable to the critical intelligence and it serves to effect a complete, although indirect, disregard of or lack of response to the specified color, permitting the same behavior or lack of behavior as would derive from absolute color blindness. By this measure, presumably, all perceptual values would become inactive and hence lost, without there being any need for a negation of seeing or an avoidance of seeing. This constitutes a situation essentially comparable to that obtaining in the color blind. The color stimulus of the plates is present, but it arouses no responsive activity because of the indirect blocking of the capacity for response through the loss of perceptual qualities effected by the amnesia. This loss of perceptual values may be taken psychophysiological as constituting a raising of the sensory threshold to the critical color.

In consequence of the failure of capacity for response to the stimuli emanating from the critical color, the subject responds as if there existed no such color, and the character and nature of his responses are determined by those stimuli which do possess perceptual values. Particularly favorable to the possibility of this type of responsive behavior is the intrinsic nature of the Ishihara Test which causes any alteration of its stimulatory values to be reflected indirectly by an adequate and different response, precluding an indirect sensing of any deficiency or incompleteness.

The assumption of the loss of perceptual and conceptual values is supported by various aspects of the behavior of the subjects. A rather dramatic example of this is the subject who, unknown to the experimenter, had a specific synesthesia in which the color red and the number "3" were so completely interdependent that any suggestion affecting the one affected the other. In particular, blindness for red led to an inability to make use of the numerical concept of three with most interesting and edifying results.*

This particular accidental finding led to rapid progress in the development of an experimental procedure. The inclusion in the experimental technique of suggestions affecting conceptual values was found to enable induction of color blindness in subjects previously resistant, and repeated clinical experimentation with the preliminary group of subjects led finally to the acceptance of the procedure described above.

2. *Comments on Experimental Findings*

In discussion of the actual experimental results, one of the first considerations

*Details of this subject's behavior will be found in the original article.

is the character of the findings. Study of both control and experimental data indicates definitely that the findings are attributable directly to the experimental measures employed and do not reflect incidental or chance factors. It discloses further that, while both positive and negative results were obtained, the significance of the negative findings is confined to an indication of the incompleteness with which the experimental object was attained, and does not constitute a contradiction or indicate an inherent limitation of the experimental methods and objectives. As for the positive results, these are clearly definite and unequivocal in character and show that the demands of the experimental situation were actually met in accord with the measures employed. Visual perceptions, ordinarily possible only to the color blind and demonstrated as impossible under ordinary conditions to the subjects, were elicited repeatedly from each of the subjects under the experimental conditions. This fact constitutes the primary and significant finding of the experiment.

The intrinsic nature of the Ishihara Test is such that it permits a variety of possible responses for each test instance, but without affording any opportunity for a deliberate purposeful selection of responses. Each of the possible responses is adequate and complete in itself, meets fully the demands placed upon the subject for a response, and carries its own significance. Also, any combination of the possible responses that may be given by the subject bears a positive meaning peculiar to such a combination. Furthermore, this variety of responses depends upon the existence within the subject of certain absolute conditions, with most of the responses possible only if the subject fulfills those requisite conditions. Yet, throughout the experiment, responses were elicited consistently and repeatedly of a character possible only if the absolute requirements of the test were met adequately by the subjects. Since such responses were obtained repeatedly from all of the subjects, and since these responses varied appropriately in accordance with the theoretical demands of each experimental situation, the findings may be regarded as clearly similar or comparable to those obtainable in various conditions of defective color vision.

The next problem concerns the possible mechanisms or psychological processes by which the experimental findings were obtained. This requires consideration of the nature of the experimental procedure, the character of the stimuli employed, the character of the responses obtained, and the associated and underlying psychological conditions entering into those results.

As has been indicated above, the hypnotic measures employed undoubtedly played a significant, though indirect, role through an inhibition of various mental processes and activities which ordinarily would interfere with the performance of the suggested task. This inhibition, restriction, or limitation of various activities related entirely to conceptual and perceptual values of a chosen color or colors, but left the subject free to respond to the stimulatory values deriving from other colors or from the lack or absence of color values, or from other indirect stimulatory values such as brightness.

To illustrate from the experiment, the suggestion of red blindness effected an inhibition of all responses to redness, but left the subject free to respond to brightness, blueness, etc. Hence, in looking at a test plate weighted with red values, the retinal stimulation deriving from the redness could not lead to perceptual or conceptual response in the subject with suggested red-blindness because of the inhibitions in force, while the other stimulatory values would lead freely to respon-

sive activity. Thus, the visual image obtained would be dominated by those stimuli actually secondary physically to the redness, and they alone would serve to give a meaning to what was seen. In other words, there occurred a relative raising of the red threshold and a corresponding lowering of the other color and sensory thresholds.

Concerning the character of the stimuli, little can be said, since regardless of the hypnotic suggestions and induced mental states, color stimulation of the retina did occur and the subjects did possess normal color vision. However, the assumption is warranted that in normal color vision, the visual image is the result of various fusion processes involving all retinal stimuli, and hence, that the normal person receives the same stimuli as does the color blind, but in addition, other stimuli which actually dominate the entire situation and determine the nature and the character of the response. But in the hypnotically color blind, apparently, despite the complete retinal stimulation, only certain stimuli served to arouse responsive activity with the consequence that the responses aroused were limited in character though adequate for the total situation.

As stated above, the responses obtained were both positive and negative for color blindness, with those positive clearly indicative of definite alterations of color vision perception, while those negative suggest an inadequacy of the experimental method. Particularly is this suggested by the variations of response to a single test plate from one state to another of suggested color blindness, as shown in the tables of the individual responses. Responses elicited in one state of suggested color blindness did not necessarily develop in another state, although there was a marked trend toward a persistence and increase of color-blind responses directly proportional to the extensiveness of the color blindness suggested. This variation of responses for different states of color blindness indicates that the responses were a direct, if not a complete, function of the suggested condition.

Also in this connection, study of the distribution of responses by subjects does not indicate, so far as can be determined, any practical effect accruing in consequence of the order of suggestion of color vision defects.

Concerning the associated and underlying psychological conditions entering into the results, consideration must be given to the changed mental perspectives afforded by both the amnesia suggested and the loss of color values. All of the female subjects manifested discomfort and even distress over their dresses which they declared were not their own. The examining room, actually familiar to them, was described as similar to the experimenter's "regular office" but "much different in many ways" and totally unfamiliar to them, and they were observed to build up an orientation for the examining room by checking their observations with their memory of the "regular office." Their entire behavior reflected the reactions of a new experience. Their reaction to the test plates may be summarized in the following quotation from one of the subjects,

This is the fourth time I've been here and each time you've shown me a pack of cards, twice each time. But the next time I come, it's a different pack. You see, there's a No. 12 in every pack and I keep watching for it to see if it is the same card that you slip from one pack to the next, but each time it's a different card even though the number is the same. I wonder just how many of those cards you're going to have.

Obviously, the personal situation for each of the subjects constituted a new and unfamiliar experience to which they could respond adequately but without utilizing certain associations, memories and learned responses. Questioning of the subjects

in the experimental situations could not be done because of the possibility of disturbing established conditions and post-experimental questioning was postponed until it was clear that no further work would be done, thus precluding more than a retrospective account. However, a general statement is warranted that the experimental experience was entered into as a totally new experience and the extent and effects of this can only be speculated upon in the light of general clinical understandings.

While discussion has been offered of various psychological aspects of the experimental findings, the problems remain of their interpretation in terms of how they were elicited and of the actual neuro- and psychophysiological processes entering into their production. Much of the discussion above may be taken to indicate that psychological processes and mechanisms constituted the primary factors, and the illustrative case of synesthesia tends to confirm this possibility. The probability is that these psychological considerations constituted no more than a favorable setting in which various neuro- and psychophysiological processes could be aroused into activity by indirect forces, and that these resulting activities constituted the primary factors in the manifestation of limited color vision. Hence, any satisfactory interpretation of the experimental findings must be based primarily upon the elucidation of the underlying neural activities.

That such an elucidation, however necessary and important, can be made is questionable. The exceedingly complex character of the experimental procedure, the complicated intrinsic nature of the color vision test plates, the limited number of subjects, and the irregularity, despite their general consistency, of the individual findings all serve to make difficult and uncertain any attempt at interpretation. In addition, the present limited knowledge of the functions of color vision and the neuro- and psychophysiological processes entering into it, the uncertainties regarding the respective roles of peripheral and central activities, and the lack of understanding of the nature of color vision except in general terms, also serve to preclude an interpretation of the experimental findings in terms of neural activities.

However, one general interpretation in the form of the conclusion is warranted, namely, that the findings demonstrate clearly that cortical processes and activities can play a highly significant role in color vision and can effect results similar if not identical with those based primarily upon peripheral activity and conditions.

CONCLUSIONS

THE CONCLUSIONS WARRANTED by the experimental findings on these six subjects may be listed briefly as follows:

1. Color blindness, red, green, red-green, and total in character, as determined by the Ishihara *Color Blindness Test* was hypnotically induced in subjects known to have normal color vision and who were found to be unable under ordinary conditions, either spontaneously or responsively, to meet the test criteria for defective color vision.
2. No conclusion can be offered concerning the psychological mechanisms and the neuro- and psychophysiological processes involved in the production of the suggested color blindness.
3. The significance of the findings lies in their evidential values concerning the importance of cortical processes in color vision.

SUMMARY

AN EXPERIMENTAL HYPNOTIC TECHNIQUE was devised involving the suggestion separately of red, green, red-green, and total color blindness, each accompanied by an amnesia for all conceptual significations of the critical color or colors. Six persons having normal color vision were subjected to this experimental procedure, and administration of the Ishihara *Color Blindness Test* disclosed them to have developed definite alterations in color vision comparable in degree and character with actual color blindness. Application of control measures disclosed the subjects to be unable to duplicate or even to approach, under ordinary conditions, their experimental behavior. Comment is made upon the rationale of the experimental procedure, the psychological processes and mechanisms entering into the production of the results, and emphasis is placed upon the need for more adequate knowledge of the neuro- and psychophysiological processes involved in color vision before an interpretation is made of the experimental findings. A final conclusion is offered that cortical processes and activities, as evidenced by these experimental findings, have a definite though undefined significance in the problem of color vision.

A COMMENT ON "THE INDUCTION OF COLOR BLINDNESS BY A TECHNIQUE OF HYPNOTIC SUGGESTION"*

WALTER F. GRETHER†

IN A RECENT ARTICLE Erickson (1) has reported an experimental attempt to induce color blindness by hypnotic suggestion. In summarizing the results of the hypnotic technique and tests with the Ishihara color blindness test he stated (p. 69) that "the hypnotic suggestion of various types of color blindness was found to induce consistent deficiencies in color vision comparable in degree and character with those found in actual color blindness." By "actual color blindness" was meant, presumably, the color vision defects normally found in a small proportion of the population, and for the detection of which the Ishihara test was devised.

There is no cause to question that color blindness, or at least color vision anomalies, did occur in Erickson's subjects while under the hypnotic influence. It is extremely unlikely, however, that the anomalies, except for the total defect, resembled the usual types of color blindness. The hypnotic suggestions used were intended to induce "amnesia" or "loss of perceptual values" (to use his terms) for certain critical colors. Presumably, such suggestions rendered the critical colors neutral, i.e., without chromatic value. The experimenter worked with four types of suggested color vision deficiency: green blindness, red blindness, red-green blindness, and total color blindness. The amnesias induced by suggestion were for the respective colors: namely, green, red, red and green, and all colors.

According to the classification supplied in the instructions for the Ishihara color blindness test there are two types of red-green color vision deficiency, green blindness and red blindness. In contrast to this, Erickson treated red-green blindness as a type separate and distinct from the two subtypes. In view of the confusing terminology such a misconception is quite understandable. The seeming ambiguity

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†The author is grateful to Dr. Erickson for readying the manuscript and offering several helpful suggestions.

of the terms results from the fact that the generic name (red-green blindness) refers to the symptoms common to both types of defect, namely, confusion of red and green. The names of the two subtypes, on the other hand, are derived from an interpretation of the respective receptor deficiencies on the basis of a three-color theory of vision.

In both types of red-green blindness the actual deficiencies in color sensations are quite different from those Erickson attempted to induce in his subjects. It has long been known that in two-color vision (of the red- and green-blind types) there is a neutral band in the blue-green region of the spectrum, at about 500 mu. All spectral colors of longer wave-length than the neutral point are alike in hue (probably yellow), although they differ in saturation and brightness. Non-spectral reds and green are often confused because they are actually of the same hue, and the saturation differences are not consistent as in the case of spectral colors. Although like red and green in hue, yellow is usually distinguished from them by higher brightness. Colors of shorter wave-length than the neutral point are also alike in hue (probably blue), but vary in saturation and brightness. Going in either direction from the neutral point in the spectrum the saturation increases with the distance. These facts about two-color vision have been shown particularly well by the recent work of Hecht and Shlaer (2).

The theoretical explanation of the neutral point for persons with two-color vision is that this wave-length arouses the subject's two color sensations in the same proportions as does white light. It follows, therefore, that in the extra-spectral series of purples there will be another neutral point, complementary to the one in the spectrum. The description thus far applied to both types of red-green blindness. The only crucial difference between the two types is that in one the visibility curve is shortened on the long wave-length end. This condition is, supposedly, due to the absence of the receptors for red, hence, red blindness. In the other type of defect it is assumed that the green receptors are either absent or in some manner undifferentiated from those for red, hence, green blindness. Because of the shortened spectrum the red-blind individuals require a much higher proportion of long wave-lengths in the extra-spectral neutral point than do the green-blind. It is by means of this difference that the Ishihara color charts distinguish between the two types of defect.

Red blindness and green blindness, as described above, are clearly quite different from the color vision abnormalities which Erickson's hypnotic suggestions were intended to induce. How, then, can we account for the fact that many of the hypnotically produced colorblind subjects read the color charts in the same manner as do subjects with true red-green blindness? There is no particular mystery about the results. In fact they are approximately as could have been predicted from the nature of the hypnotic suggestions and the principles underlying the test charts.

Most of the Ishihara charts utilize confusion of red and green to detect color blindness. Subjects with these two colors rendered neutral by hypnosis would, therefore, tend to read the same numbers in many of the charts as do persons with true color blindness. Subjects with hypnotic blindness for red or green alone would tend to read more of the charts in the same manner as persons with normal vision. It is not surprising, then, that the number of normal color vision responses out of

a possible 60 were 30, 17, 6, and 4 respectively for the suggested green, red, red-green, and total color blindness.

Particularly indicative of the differences between hypnotic and true color blindness are the diagnoses given by Charts 12 and 13, which are especially designed to distinguish between red and green blindness. These charts function on the principle that the extraspectral neutral points for the two types of subjects are different. Each plate has two colored numerals upon a gray ground. One of these numerals is a red containing enough blue to render it neutral to the typical red-blind person. The other numeral, purple in color, is designed to appear neutral to the green-blind. On this test a person with hypnotic blindness for red would be expected to miss the redder of the two numerals, as do the true red-blind. A subject with hypnotic blindness for green, on the other hand, would hardly be expected to miss either of the numerals. The results agree remarkably well with these expectations. For hypnotic blindness to red there were 8 red- and no green-blind responses in 12 chart readings. For hypnotic blindness to green there was one red- and one green-blind response (both by same subject) out of 12. For hypnotic red-green blindness there were 8 red- and 2 green-blind responses out of 12.

There is no difficulty, of course, in accounting for the correspondence between hypnotic total color blindness and the uninduced total defect. In both cases all color sensations should be absent, and equivalent performance would therefore be expected on the Ishihara test.

It is evident from the foregoing discussion that the validity of Erickson's statement that the hypnotically induced color vision deficiencies were comparable in degree and character with actual color blindness is extremely doubtful. The following conclusions would seem appropriate to his experiment and results:

1. Color blindness was successfully induced by a technique of hypnotic suggestion, but except in the case of total color blindness the visual sensations were fundamentally different from those accompanying the usual (non-hypnotic) forms of color vision deficiency.
2. In spite of the dissimilar character of hypnotic and actual color blindness, similar responses were, in many cases, given to the Ishihara color charts.
3. The responses of the hypnotic color-blind subjects to the Ishihara color charts were approximately as could have been predicted from the nature of the hypnotic suggestions and the principles underlying the color blindness test.

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The Translation of the Cryptic Automatic Writing of One Hypnotic Subject by Another in a Trance-Like Dissociated State*

DURING THE TRAINING of a subject for a particular experiment in hypnosis, a unique observation was made upon the ability of one person in a spontaneous trance accurately to decipher and to translate the mysterious and cryptic automatic writing of another. In their conscious states, neither individual could understand the script. In trance-like states, each one quite independently reached identical interpretations of it. Cryptic automatic writing is found to suffer from processes of distortion identical with those seen in dreams; and the translation of such writing, to involve the same principles as those involved in dream analysis.

In chronological sequence in the protocols detailed below, there is portrayed both the general situation and the series of events leading to these observations: (1) the subject as an incident in his training and while in a deep trance was told by an assistant in the absence of the investigator, to forget all the vowels but not the fact of their existence. (2) In another trance a week later, he was given additional suggestions to the effect that he would replace the seventh (g), eighth (h), and ninth (i) letters of the alphabet with their respective numerals and that henceforth his name would be "Jack Young." (3) He was then asked to write his name. In doing this he omitted the vowels and substituted the numeral "10" for the letter "J," declaring emphatically as he completed this task that something was wrong.

Assuming in the interpretation of hypnotic productions as in the interpretation of dreams, that every trivial detail has meaning, the assistant sought to secure from the subject an explanation both of his use of the numeral *ten* and of his comment that something was wrong. The subject wrote the letters "N" and "F" and the numerals "7," "7," "8" and "9" automatically in his effort to explain these phenomena, apparently offering them as an adequate explanation of everything. Dissatisfied, the assistant demanded a more understandable written explanation. This resulted in still more abbreviated and cryptic automatic writing; and further requests produced merely a repetition of that writing, despite the assistant's efforts to compel some alteration of the written characters by active physical interference.

External circumstances then terminated the interview at this point but not before the subject had demonstrated his complete lack of any conscious understanding of what his written "explanation" meant, or of what the "mistake" had been, and whether it was the substitution of a "10" for the "J" in his written name.

After the subject left, the investigator came in the laboratory and while he and his assistant were puzzling over the cryptic writing, a second subject, Alice,† entered the laboratory and showed an immediate interest in the problem. This subject has the rare capacity to develop spontaneous hypnotic trances during which she functions adequately in whatever situation she finds herself. Upon awakening from them, she has no awareness of her trance activities. Because of her interest in

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†At the time of original publication of this article, it was not possible to report the following facts, permission for the publication of which has since been granted: Alice was a true dual

the problem, she was given an outline of the essential facts and the writing was shown to her by the assistant who then departed leaving this second subject, Alice, to puzzle over the writing with the investigator.

Thereupon, Alice developed a series of spontaneous trance states interspersed with ordinary waking states. In the trance states she interpreted the writing item by item and explained it step by step to the investigator who maintained essentially a passive, receptive role. This passive role was forced upon the investigator by the brevity of the spontaneous trances, the difficulty of trying to carry on a conversation with her at all, and the necessity constantly to meet her at two different levels of awareness in a single situation. Alice's spontaneous trances tended to be so brief that she would have time to offer only an explanatory remark or two and would then awaken with no awareness of what she had just said. In the waking state, she would continue her puzzled wonderment over the writing which had just been interrupted by the spontaneous trance, or she would become interested in some totally unrelated topic and discuss that until some remark of the investigator disclosed to her his own unclear state of mind regarding the last bit of explanation she had given. There would follow another spontaneous trance in which, briefly and concisely, Alice would make another remark to clarify the investigator's mind. As a consequence, it was necessary for Alice to develop a large number of spontaneous trances and to repeat her explanations many times before she could feel satisfied with the investigator's comprehension of what had been said. In addition, Alice's explanations were often as cryptic to the investigator as the writing itself, as for example her use of the word "sign" to explain the correctness of the letter "H" (cf. the protocol below).

In the intervals between the spontaneous trances, investigation showed that Alice had a complete and persistent amnesia for all of her trance disclosures, even after the entire interpretation of the writing had been secured; furthermore, when her own interpretation of the writing was presented to her, she regarded it purely as a product of the investigator's own reasoning. However, when questioned about it in an induced trance state, she not only recognized the explanation as her own but meticulously corrected the slightest change in wording introduced by the investigator.

Why Alice resorted to this devious and uncertain method of communication instead of permitting herself to develop flashes of conscious insight is a matter for speculation not wholly explained by her statement that the writing represented her own unconscious way of thinking and writing.

The following day, the first subject, T. L. came to the office unexpectedly to report what he termed "an amusing hypnagogic experience." Unaware that the assistant had told the investigator of the original situation, and unaware also of the investigator's subsequent experience with Alice, he described fully his own experiences with the assistant on the previous day, corroborating the details given by

personality, possessing a completely secondary personality named — which periodically manifested itself spontaneously. The "spontaneous hypnotic trances" referred to above were actually periods in which the secondary personality — was manifest. Hence, the actual translation of the cryptic automatic writing of the subject T. L. was carried out by the secondary personality—. The conclusions in the original paper continue to be valid, inasmuch as Alice was completely unconscious of the activity of her secondary personality — in deciphering the automatic wiring.

the assistant and including others which were later verified. He emphasized in particular his own argumentativeness, his insistence that there was a mistake in the written name, his feeling of absolute certainty about his conscious understanding, and his feeling of irritation with the assistant whose manner seemed unwarrantedly to imply that there were unrecognized meanings in the writing. He related that, after his departure, he had forgotten about the incident until, falling asleep late that evening, he had a "hypnagogic experience" in which he "saw" the episode exactly as it had occurred with a new interpretation of it all. He expressed much amusement over his earlier belligerency and defensiveness, and also about his new realization of "how intensely you can believe something that is totally wrong, when right in your subconscious you know the truth." He went on to explain that along with his original "conscious explanation" he now "saw" the "true subconscious explanation" which was not at all similar to his "conscious explanation." Asked to restate his original "conscious explanation," he claimed that, because it was "so wrong," he could no longer remember more than a vague outline of it, but that now he was ready to give the "correct explanation of the whole thing."

In response to the investigator's manifest interest, he proceeded to give his explanation, but not with the confidence his manner had led the investigator to expect. It became apparent at once that the subject's conscious grasp of the problem was limited and that he only thought he understood it. Actually, his method was to offer sudden, brief, dogmatic statements as if each were the complete explanation, only to discover spontaneously that the explanation was inadequate. Then there would follow another sudden flash of conscious insight and another dogmatic statement.

After a number of such steps, the subject took the attitude of one solving a puzzle and began to search for the explanation of his various dogmatic statements and for the significance of the writing. As he studied the writing and tried to fit his various statements to it, additional flashes of insight developed, sometimes relevant to the immediate question he was trying to solve, and sometimes pertinent to another item not yet touched upon. Thus, bit by bit in an unsystematic fashion, a complete explanation was developed which was in full accord with the one given by Alice. In this episode, the investigator's role was again a passive, receptive one.

Of marked interest is the fact that neither subject volunteered any interpretation of the first "explanation" written as four digits. Both subjects ignored that particular writing completely until it was called to their attention. Alice remarked simply that everything was included in the writing she had explained, while T. L. commented briefly, "That's [the digits] not so good; the writing's better."

FIGURE 1

FIGURE 2

FIGURE 3

FIGURE 4

FIGURE 5

FIGURE 6

PROTOCOL I*First Week*

1. Subject T. L. was told while in a hypnotic trance to forget the vowels of the alphabet but not the fact of their existence.

Second Week

2. Subject T. L. was again hypnotized and told this time to replace the seventh, eighth and ninth letters of the alphabet (g, h, and i) with their respective numerals.

3. T. L. was then told that his name was "Jack Young" and he was asked to write it.

4. T. L. wrote his name "10 ck Yng" (cf. FIG. 1).

5. Upon inspection of his writing, T. L. declared it to be incorrect, that the "J" was a mistake, and he became disputatious when the assistant suggested that it might be correct.

6. The assistant asked, "Is what you wrote correct?"

7. T. L. wrote automatically the character "N," which was interpreted by the assistant as a "No," but this T. L. did not confirm (cf. FIG. 2).

8. The assistant asked if the writing was apparently incorrect.

9. T. L. wrote automatically the character "F" which the assistant interpreted as a "Yes," but this again was neither confirmed nor corrected (cf. FIG. 3).

10. The assistant then asked why the writing was only apparently incorrect.

11. T. L. wrote automatically the construction, "7 7 8 9," very faintly and somewhat illegibly (cf. FIG. 4).

12. The assistant asked that the explanation be rewritten plainly and clearly and in a fashion understandable to both of them.

13. T. L. then added to the "N" and the "F" already written a peculiar group of letters (cf. FIG. 5).

14. The assistant, after scrutiny of this writing, asked T. L. to rewrite on another sheet of paper his explanation in a more clearly understandable and readable fashion.

15. T. L. complied with this request by producing a second graphic construction, essentially a repetition of the previous one, ignoring and resisting as he did so the assistant's attempts to compel an alteration of the writing by forcibly moving the paper while T. L. was engaged in his task (cf. FIG. 6).

16. No further verbal explanation of the writing was obtained at this time except an argumentative repetition of his previous declaration that the written name contained a mistake; namely, the use of 10 for J. External circumstances then brought the interview to an end.

PROTOCOL II*Entrance of Alice*

1. The written name was exhibited to Alice by the assistant, and a rapid explanation was given of the post-hypnotic suggestions regarding vowels and the replacement by numerals of the seventh, eighth and ninth letters, and T. L.'s insistence that there was a mistake in the writing of the name. Following this, the assistant left.

2. Alice studied the name as it was written and then counted the letters of the alphabet rapidly.

3. Alice's explanation: "J" has the ordinal position of "10" but the omission of the vowels gives it the ordinal position of "7," "7," however, is actually identical with "G" and, hence, it cannot be used to designate "J." Therefore, "J," the seventh letter, must be written "10." In brief, J is both the seventh and the tenth letter, but it can be written numerically only as "10."

4. Alice was then shown T. L.'s written production, FIG. 6. This, she promptly read as "Numbers for letters," illustrating this significance by immediate reference to the use of a "10" for a "J" in the written name.

5. The investigator then gave Alice the additional information about the assistant's interpretation of the letter "N" as signifying "No" (cf. FIG. 2).

6. The writing was read then by Alice as, "Not letters; numbers for letters."

7. Alice's explanation: The second character in the written explanation actually is a "T" as well as an "F" and may equally well be read as a "4." T. L.'s passive acceptance of the interpretation of a "No" serves to transform the first two characters of the writing into the word "Not" with the vowel omitted; furthermore, since the second character is obviously an "F," and also a "4," emphasis is thereby placed upon the second character and this is indicated doubly by the fact that the letter "F" actually is the fourth letter in the alphabet with the vowels omitted. Hence, "F," by virtue of all this, can be used to signify "for" as a simple pun as well as an abbreviation.

8. Therefore, on first reading the written explanation, one reads "Not letters," but since this is only part of an explanation, one must reread the written characters for their additional meanings; hence on second reading, one reads "No 4 ltrs," or "Numbers for letters."

9. The investigator accepted this reading unquestionably, but asked what the "th" meant, since it appeared in both of T. L.'s written explanations.

10. Alice first explained with the single word "sign," but finally declared that it was connected "by the sign," which she identified by gesture as the line underneath the "th," with the second character of the written explanation and that it "explained" the "mistake."

11. Alice's explanation: The second character reads "T," "F," "4," and "for," but in relation to the "th" it also reads "7." "G" is the seventh letter of the alphabet. "G" should be written as "7." "G" is written "G" in the name, hence, "G" is a mistake.

12. The investigator then asked Alice to read aloud the written explanation, which she did as follows: "Not letters; numbers for letters; not 7; seventh letter; 7 in place of letter," and as this explanation was read, Alice declared that there was a concealed "7" in the word "ltrs," an item which had been consistently overlooked by the investigator.

13. As an additional explanation, Alice added, "7" should be in the place of the letter "G" in the name, but a mistake was made and "G" was written. So to explain what he meant by "a mistake," "7" is written here [pointing to the concealed "7" in the character "ltrs"] so that you can see that there is really a "7" in the place of "letters" where you should read it, but where you really read just "ltrs."

14. The investigator asked if there were any further explanation of the "th" since "H" is the eighth letter.

15. Alice explained, "It is a sign. You read '7th' not '7-t-h'." To this was added, "Not mistake like 'G.' It [th] is a sign."

16. The investigator then raised the question of "G" becoming the fifth letter of the alphabet with the vowels omitted. Alice explained that "G" could not be the fifth letter because the difficulty about the "J" had definitely established "G" as the seventh letter.

17. Alice was then asked about the letter "K." Again she explained that the establishment of the letter "J" as number "10" provided a point of orientation for all of the letters in the alphabet, regardless of the omission of the vowels, and she restated the fact that the vowels had only been forgotten, but not the fact of their existence. Therefore, the letter "J" established as number "10" would automatically cause "K" to be letter number "11" and "G" to be letter number "7."

18. Alice then was asked about the identification of the letter "F" as the number "4" by virtue of the omission of the vowels. Alice pointed out immediately that this was purely for purposes of punning and that anything was permissible in a pun.

19. Alice was then asked to explain how it was that she could interpret such cryptic writing.

20. Alice's explanation: "Oh, that's easy. That's just the way I always think and write. Just a little means a lot."

21. Alice was asked, "How could you know that the writing could be interpreted?"

22. Alice's explanation: "When you knew about the vowels and the numbers, then you could see lots of meanings all at once right here and you could just read them."

23. When asked about the written digits in FIG. 4, Alice explained that they meant the same as the writing, but not so clearly.

PROTOCOL III

The Next Day

1. Subject T. L. reported to the investigator an "amusing hypnagogic experience" in which "I remembered the whole situation. I had a complete conscious explanation at the time. I was so sure of it, too; I wanted to argue. I said there was a mistake. I remembered every little detail of that whole situation, and, at the same time, in that hypnagogic state, I could see the whole thing in an entirely different way. Half asleep there, I could see my conscious understanding of that whole situation and at the same time I could see my subconscious understanding. The two were so different and I had been so sure of my conscious understanding, but it really was all wrong. I didn't have anything right in my consciousness at all, and yet I wanted to argue; I was looking for an argument."

2. The investigator asked T. L. for an account of his conscious understanding.

3. T. L. declared that he could not remember anything about it except that it was all wrong, nothing right. "I wasn't even thinking about the things I thought I was thinking about." The investigator asked him to explain this more fully. T. L. replied, "Consciously, I said there was a mistake but the mistake I thought I was talking about wasn't a mistake at all. I thought I was talking about 'J' but in that hypnagogic experience I knew that 'J' was right but that 'G' was a mistake. 'J' was just a mistake to my consciousness even though it was not a mistake to my subconsciousness."

4. The investigator asked T. L. to give an account of his subconscious understandings.

5. There followed then an explanation of the writing in which item by item was accorded the same interpretation as had been given by Alice. The method by which his explanation was achieved was one based upon sudden flashes of insight, such as obtain in the solving of a puzzle. Thus, in relation to the second character (cf. FIG. 3), he declared he could explain it best by writing it from memory, whereupon he proceeded to write the French form of the numeral "7" (the subject had studied French). In the usual position, elevated above the line, he added to this numeral a "*th*." When the accuracy of his recollection was questioned, he became decidedly disputatious and insisted that it was right because of the line underneath the "*th*." From these disconnected flashes of insight, partial understandings of several different aspects of the problem were obtained. Alice, on the other hand, recognized the numerical quality of that character along with its other attributes without resort to intermediary steps.

6. The order in which T. L. built up his interpretations of the written explanation shown in FIG. 6 was as follows:

(a) Declaration that the use of a "10" for a "J" in the written name was not an error but that the "G" was an error.

(b) Statement that the writing (FIG. 6) read both "Not letters" and "Numbers for letters."

(c) Elucidation of the use of a "10" for a "J." "Without the vowels, 'J' was the seventh letter and I had to put a number for that letter, but I couldn't put a '7' because, even if there were no vowels, you had to count their places and that would make 'G' the seventh letter just as 'J' was, so I just wrote the correct number for the letter 'J'."

(d) Identification of the "F" (FIG. 2) as a "T," and "F," a "4" and as "for" followed by its identification as a "7" as described in Item 5, and by relating this explanation to the clarification of the "mistake" contained in the letter "G."

(e) Declaration that there should be a "7" in addition to the one contained in the second character of the written explanation, to be read with the "*th*" as "seventh letter."

(f) Discovery of the concealed "7" and the reading of the message as "Not letters, numbers for letters, not 7, seventh letter, 7 in place of letter."

(g) Clarification of the question of the "K" and the "H" in the same fashion as Alice had done.

(h) Discovery of the pun on "4" and "F" contained in the second character of the written explanation, since previously, he had regarded the "F" as a simple abbreviation for "for."

7. Declaration that the four digits, illustrated in FIG. 4, constituted a similar but less satisfactory explanation than the writing in FIG. 6.

8. Explanation that FIG. 6 differed from FIG. 5 only because of the assistant's interference. Alice had declared them to be identical in meaning.

DISCUSSION

1. THE MAIN EVENT of this unplanned and unexpected experience is in itself worthy of record for it is an arresting fact that one human being while in a dis-

sociated trance-like condition can accurately decipher the automatic writing of another—writing which neither of the two subjects was able to decipher while in states of normal consciousness. The observation stresses from a new angle a fact that has often been emphasized by those who have studied unconscious processes but which remains none the less mysterious—namely, that underneath the diversified nature of the consciously organized aspects of the personality, the unconscious talks in a language which has a remarkable uniformity; furthermore that that language has laws so constant that the unconscious of one individual is better equipped to understand the unconscious of another than the conscious aspect of the personality of either.

If this is true, and it seems to be a fact attested from many sources, it must give the psychoanalyst reason to wonder as to the wisdom of confining himself exclusively to the technique of free association in his efforts consciously to penetrate into the unconscious of his patient.

2. When one turns to the details of this experience, one finds several points which need more specific emphasis, and certain basic questions which remain wholly unanswered:

(a). In the first place, it is striking that in the translation of automatic writing, as in the interpretation of dreams, each element may be made to do double and triple duty: to wit, the several purposes subserved by the letters N and F.

(b). Again we see that here, as in dreams, puns, elisions, plays on words and similar tricks that we ordinarily think of as frivolous, all play a surprising and somewhat disconcerting role in the communication of important and serious feelings. We accept this type of thought and language in simple jokes as for instance in the old conundrum of childhood: "How do you spell 'blind pig'?" to which the answer is "b l n d p g—leave out the 'eyes'." But it is ever a source of fresh amazement when the unconscious processes express weighty and troublesome problems in a shorthand which has in it an element of irreverent levity.

(c). In the whole episode, there are two untouched problems—why in the first instance the "mistake" occurred at all (the slip is seemingly trivial, a tempest in a teapot) and second why, when the mistake had occurred, the first subject, T. L., could not have recognized it and corrected it simply and directly. Perhaps it is of importance that the mistake concerned the patient's own identity, i.e., the automatic spelling of his own name. It will be recalled that in the course of the experiment, his name had been changed by suggestion to "Jack Young."

It is possible that a highly charged rebellion against the implantation under hypnosis of this alternative personality, struggling with a coexistent attitude of passive submission to the authority of the hypnotist may account for several things: the exaggerated tempest, the curiously evasive quality of some of the replies, the ambiguities (as if he did not know whether to correct the error or not) the elements of malicious humor, the literal-mindedness, the hiding. All of this seems to indicate that, both in the automatic writing and in the subsequent efforts to translate it, the subject is struggling simultaneously to explain and to hide his meaning. In support of this hypothesis, there is one possible explanation of the writing, which neither subject offered although it is a rather obvious alternative: if N equals "not;" and if F is also a "T," and if we consider that the first letter of the following group of letters is L, then the first three letters would read "not T. L."—in other words, not the subject's own initials.

It may well be that if we knew enough about the subject, T. L., and the identifications which must make up the basis of the structure of his whole personality, that this otherwise mysterious little episode would then become quite understandable.

The Nature and Character of Post-Hypnotic Behavior*

DESPITE THE GENERAL FAMILIARITY of post-hypnotic behavior and its extensive role in experimental and therapeutic work, little attention has been given to it as a problem in itself. Attention has been focused almost exclusively upon the various activities suggested to the subjects as post-hypnotic tasks, with little heed given to the nature of the behavior characterizing the post-hypnotic state. Emphasis has been placed upon the results obtained from post-hypnotic suggestions and not upon the character or nature of the psychological setting in which they were secured. The study of the mental processes and the patterns of behavior upon which post-hypnotic results are based has been neglected. Yet there has been a general recognition of certain significant facts regarding the post-hypnotic performance which imply the existence of a special mental condition out of which the post-hypnotic act derives.

Foremost among these facts is the occurrence of the post-hypnotic act in response to a suggestion which is remote from the situation in which it has its effect. The immediate stimulus (post-hypnotic signal) eliciting the post-hypnotic act serves only to establish the time for the activity and not the kind of behavior which is determined by other factors.

In a search of the literature published during the past 20 years, covering approximately 450 titles, no references were found which were suggestive of a direct study of post-hypnotic behavior itself, although many of the titles indicated that post-hypnotic suggestion had been used to study other patterns of behavior. Similarly, a review of approximately 150 selected articles and books, some of which were published as early as 1888, yielded only a little information definitive of post-hypnotic behavior as a specific phenomenon.

The more instructive references were found chiefly in the general textbooks on hypnotism rather than in experimental studies involving the use of post-hypnotic behavior. However, even these were general assertions or brief, vague, and sometime self-contradictory statements, based either upon the author's own experience and that of others, or upon experimental material of an inadequate and often irrelevant character in which there was a marked confusion of the results of suggested post-hypnotic activities with the mental processes and patterns of post-hypnotic behavior by which those results were obtained.

Nevertheless, despite their inadequacies, the references found did indicate that there had been frequent recognition of post-hypnotic behavior as a phenomenon in itself, and a number of these will be cited and discussed briefly, with emphasis placed primarily upon those points we propose to develop in direct relation to experimental data in the body of this paper.

Bernheim (1, p. 157) in discussing post-hypnotic activities, states, "I have said that somnambulists who are susceptible to suggestions *à longue échéance* are all

*With Elizabeth M. Erickson. *J. Gen. Psychol.*, 1941, 24, 95-133.

eminently suggestible, even in the waking condition; they pass from one state of consciousness into the other very easily; I repeat the fact that they are somnambulists spontaneously, without any sort of preparation," but he offers no elaboration of this statement.

Sidis (13, p. 174) recognizes that post-hypnotic behavior is a thing apart from ordinary conscious behavior and is marked by special characteristics: He declares "The post-hypnotic suggestion rises up from the depths of the secondary self as a fixed, insistent idea. . . . In hypnosis the suggestion is taken up by secondary, subwaking, suggestible self, and then afterward this suggestion breaks through the stream of waking consciousness. . . ." Bramwell (3, p. 95) states:

Under ordinary circumstances, the instant hypnosis is terminated all the phenomena which have characterized it immediately disappear. In response to suggestion, however, one or more of these phenomena may manifest themselves in the subject's waking life. This is brought about in two ways. (1) Where the operator suggests that one or more of the phenomena shall persist after waking. . . . (2) The most interesting class of post-hypnotic suggestions, however, are those in which the appearance of the phenomena has been delayed until some more or less remote time after the termination of hypnosis.

Later in the same chapter, Bramwell (3, p. 111-112) says "According to most authorities, post-hypnotic suggestions, even when executed some time after awakening, are not carried out in the normal condition; there is, in effect, a new hypnosis or a state closely resembling it." He adds:

According to Moll, the conditions under which post-hypnotic acts are carried out vary widely. He summarizes them as follows: (1) A state in which a new hypnosis, characterized by suggestibility, appears during the execution of the act, with loss of memory afterwards and no spontaneous awakening. (2) A state in which no symptoms of a fresh hypnosis are discoverable although the act is carried out. (3) A state with or without fresh susceptibility to suggestion, with complete forgetfulness of the act and spontaneous awaking. (4) A state of susceptibility to suggestion with subsequent loss of memory.

Apparently, Bramwell approves of this fairly adequate, though confusingly worded, recognition by Moll of the existence of a post-hypnotic state. Nevertheless, he continues his discussion with an irrelevant exposition of the immediate results obtained through post-hypnotic suggestion in the treatment of physiological disturbances. Except for other similar unsatisfactory and scattered references, he makes no further effort to elaborate his points or those he emphasizes from Moll.

Schilder and Kauders (12, p. 64) offer the following somewhat contradictory statements which emphasize that the post-hypnotic state is of a special character, but is hard to recognize.

Certain authors actually assume that the hypnosis again comes to life during the execution of the post-hypnotic command, an assumption which is justifiable to the extent that in a number of such cases, the persons experimented on actually do enter into a dream-like state while executing the post-hypnotic order. In other cases, the person complying with the post-hypnotic order can hardly be distinguished from any other person carrying out an order, so that it would be far-fetched to speak of a renewal of the hypnotic state.

No further effort is made to develop these points, except by a general discussion of some results obtained through post-hypnotic suggestion.

Binet and Fere (2, p. 177) recognize that subjects show a peculiar sensitivity to

suggestion after awakening from a trance: ". . . when a subject remains under the influence of a suggestion after awaking, he has not, whatever be the appearance to the contrary, returned to his normal state."

Hull (6, p. 300) takes exception to this, commenting: "This statement is similarly ambiguous from our present point of view because acts performed by post-hypnotic suggestion constitute a special case, as is shown by the fact that they are usually followed by waking amnesia of the acts in question." Just how this comment applies to that observation by Binet and Fere is uncertain. Although Hull recognizes in his textbook (6) that post-hypnotic behavior is a "special case," he disregards his own statement, as well as his awareness of the observation by Binet and Fere. Neither he nor his associates make any attempt in their extensive experimental work to provide for the possible existence of any special post-hypnotic state which might have a significant bearing upon post-hypnotic activities. Hull devotes an entire chapter of his textbook to post-hypnotic phenomena, but limits it to studies of amnesia for directly suggested activities and the durability of post-hypnotic commands, with no reference to that mental state of which the retention and execution of suggestions constitute only a partial reflection.

Nor are Hull and his associates alone in this regard. It is a general tendency to study post-hypnotic behavior only in terms of how well some suggested task is done, without regard for the psychic condition constituting the setting for that task. This oversight largely accounts for the confused, unreliable, and contradictory nature of the results obtained in experimental studies of post-hypnotic phenomena.

In his study of functional anesthesias, Lundholm (9, p. 338) states, "The experiments were carried out with the subject in a post-hypnotic fully waking condition, but in which he was deaf for the sound-click, the deafness being due to preceding suggestion during hypnotic sleep." An assumption is thereby made that the subject was fully awake. It is not recognized that the suggestions given served to effect an actual continuance of the significant part of the trance state, since the post-hypnotic suggestion compelled an uninterrupted persistence of certain phenomena of the trance state, not possible in a fully waking condition.

Another instance in which there is a complete disregard for the post-hypnotic state and a confusion of somnambulistic states with the waking condition may be found in Platanow's (11) experiment on age regression:

After the subject had reached a suitable stage of hypnosis, we generally addressed him as follows:

"At present you are six years old." (This suggestion was repeated three times.) "After you wake up you will be a child of six. Wake up!"

After the subject was awake, a short conversation was held with him, for orientation purposes, and this was followed by tests according to the Binet-Simon method. By means of suggestion the subjects were transferred to the ages of four, six, and ten. When transferred from one age to another they were hypnotized, given the corresponding suggestion, and awakened again. The experiments were generally ended by the suggestion of the real age, and were followed by amnesia.

From this description, one is led to believe that the subjects were awake in the ordinary sense of the word during the administration of the psychometric tests, despite the experimenter's recognition that normal waking memories did not obtain and the fact that his experimental findings proved amply that a mental state other than the normal waking one was elicited by the post-hypnotic suggestions.

A review of the articles of Hull and his associates shows many references to the problems involved in studying the outcome of the post-hypnotic state. There is no apparent realization that the subject, as a consequence of receiving post-hypnotic suggestions or executing post-hypnotic acts, might manifest behavior apart from the assigned task which could alter the task performances significantly (6).

The fact is disregarded that there must necessarily be some state of mind which permits a coming forth into consciousness, or partial consciousness, of the post-hypnotic suggestion, of which quite frequently no awareness can be detected in the subject until after the proper cue is given. Even then, that awareness is of a peculiar, limited and restricted character, not comparable to ordinary conscious awareness. Hull and his associates have directed their attention exclusively to the beginning and the end of a long, complicated process and have disregarded the intermediary steps.

To illustrate the confusion which exists in the use of post-hypnotic suggestion, an experiment by Williams (14, p. 324) may be cited:

In the case of the combined trance-normal work-periods, the subject was awakened when he had reached exhaustion in the trance by repeating rapidly, "*One, two, three—wide awake.*" The instruction to "keep on pulling" was also added in this case so that the subject would continue his work, if possible, in the waking state.

In this combination of instructions in the trance state—to awaken and to keep on pulling after awakening, Williams actually gave his subjects a post-hypnotic command. Hence, the "waking performance" was in response to an unintentional and unrecognized post-hypnotic suggestion. Williams apparently assumed that an awakening from a hypnotic trance could be accomplished instantly, despite a continuance of trance activity. He also assumed that a trance induction could occur instantly without any interruption of waking activities. Hence, the validity of his findings as representing performances in waking and in trance states is to be questioned.

This same confusion of ideas with regard to post-hypnotic suggestion and the results to be expected from it is shown by Messerschmidt (10) in her experiment on dissociation. Post-hypnotic commands were given in direct and indirect relation to separate tasks; one of which presumably, to be done at a conscious level of awareness and the other as a post-hypnotic or "subconscious" performance. As a consequence, both the post-hypnotic behavior and the supposedly waking behavior became integral parts of a single performance, one part of which was provided for by direct post-hypnotic suggestions. The other part was in response to indirect and unintentional post-hypnotic suggestions, namely the instruction that the post-hypnotic activity was to be carried on regardless of the assignment in the waking state of a new and different task. The subjects necessarily became aware in the trance state that the desired performances were to be dual in character. To instruct a subject in the trance state to execute a given task after awakening, when the subject has full knowledge also of the fact that a second task, contingent upon the first, will be imposed upon him in the waking state, is actually a method of giving *two types* of post-hypnotic suggestion. To instruct a subject in the trance state that, upon awakening, he is to do serial addition by automatic writing without regard for any other task which may be given him, or to do serial addition "subconsciously" while reading aloud "consciously," constitutes the giving of post-

hypnotic suggestions covering both activities: The "conscious" task actually becomes a post-hypnotic performance concomitant with the other post-hypnotic activities. To suggest to the hypnotized subject that he will do one task "subconsciously" and another task "consciously" will elicit post-hypnotic performances of both tasks, not a waking performance of one (despite the greater degree of conscious awareness of it, which itself constitutes an additional post-hypnotic response). Messerschmidt's experiment, like Williams', makes no provision for the possible existence of a special post-hypnotic mental state that might exercise a significant influence upon the performance of the suggested tasks.

Quite different is the report by Brickner and Kubie (4), who emphasize throughout their investigation the significant effect which the mental state that develops directly from post-hypnotic suggestions has upon the total pattern of behavior. They also note the disappearance of those changes in the general behavior upon the completion of the post-hypnotic task.

Similarly, Erickson (5), and Huston and his co-workers (8) demonstrate clearly the development, in direct consequence of post-hypnotic suggestion, of a special mental condition which influences, alters, and even negates the subject's ordinary waking behavior in routine situations until the post-hypnotic suggestion has been either removed or acted upon completely.

While this review of the literature is necessarily incomplete, it discloses that much experimental work has been done on post-hypnotic behavior with no attempt to define the post-hypnotic state or to provide for any significant bearing it might have upon experimental procedures. There has been no attempt to define the post-hypnotic act specifically, except in terms of the results secured from it. The mental processes and the patterns of response by which those results were achieved have been ignored. It has generally been assumed that the post-hypnotic act is simply a performance elicited in response to a command given during the trance state, variously and uncertainly characterized by degrees of amnesia, automaticity, and compulsiveness. Much experimental work has led to unsatisfactory and conflicting results. There is a need for more definitive studies of post-hypnotic behavior as a specific phenomenon rather than as a means by which to study other mental processes.

DEFINITION OF THE POST-HYPNOTIC ACT

WE HAVE FOUND the following definition of the post-hypnotic act to be consistently applicable and useful. It describes adequately a form of behavior we have elicited innumerable times in a great variety of situations from a large number of subjects ranging in type from the feeble-minded to the highly intelligent, the normal to the psychotic, and from children to adults. For the moment we shall limit this definition strictly to the act itself, without regard for partial performances resulting from light trances or for certain other important considerations which will be discussed later:

A post-hypnotic act is one performed by a subject after awakening from a trance in response to suggestions given during the trance, the execution of the act being marked by the absence of any demonstrable conscious awareness in the subject of his causal motive for his act.

THE BEHAVIOR CHARACTERIZING THE POST-HYPNOTIC PERFORMANCE

THE IMPORTANT ATTRIBUTE of the post-hypnotic response consists of *the spontaneous and invariable development of a self-limited, usually brief, hypnotic trance, as an integral part of the performance of the suggested post-hypnotic act.*

Repeatedly, under varying circumstances and in a great variety of situations, we have observed the hypnotized subject instructed to execute some act post-hypnotically develops spontaneously a hypnotic trance. This trance is usually of brief duration. It occurs in direct relation to the performance of the post-hypnotic act and apparently constitutes an essential part of the process of response to and execution of the post-hypnotic command. Its development has been found to be an invariable occurrence (despite certain apparent exceptions which will be discussed later), regardless of the demands of the post-hypnotic suggestion, which may entail a long, complicated form of behavior, the introduction of a single word into a casual conversation, the development of an emotional response, an avoidance reaction or even a slight modification of general behavior. The development of this trance state as a part of the post-hypnotic performance requires for its appearance neither suggestion nor instruction. It occurs as readily in the naive as in the highly trained subject; its manifestations differ in no way from those of an ordinary induced trance; and it seems to be a function of the process of initiating a response to the post-hypnotic suggestion.

THE GENERAL CHARACTER OF THE SPONTANEOUS POST-HYPNOTIC TRANCE

THE SPONTANEOUS POST-HYPNOTIC TRANCE develops at the moment of initiation of the post-hypnotic act, and usually persists for only a moment or two. Hence, it is easily overlooked despite certain residual effects it has upon the general behavior. Under various circumstances, and with different subjects, the trance may be multiple, actually a succession of brief spontaneous trances related to aspects or phases of the post-hypnotic act. It may persist throughout the greater part or the entire duration of the post-hypnotic performance. There may be an irregular succession of relatively short and long spontaneous trances apparently related to the mental and physical difficulties encountered in the course of the execution of the post-hypnotic act. Any variation in the form or the time of its appearance or reappearance seems to be a function of individual differences in subjects, general situations, or the post-hypnotic acts themselves.

SPECIFIC MANIFESTATIONS OF THE SPONTANEOUS POST-HYPNOTIC TRANCE

THE SPECIFIC HYPNOTIC MANIFESTATIONS which develop in relation to the performance of the post-hypnotic act form an essentially constant pattern; the duration of the separate items of behavior varies greatly in accord with the purpose served and with the individual subject. They occur rapidly in direct relation to the giving of the specified cue for the post-hypnotic act, with a tendency toward the following sequence: A slight pause in the subject's immediate activity, a facial

expression of distraction and detachment, a peculiar glassiness of the eyes with a dilatation of the pupils and a failure to focus, a condition of catalepsy, a fixity and narrowing of attention, an intentness of purpose, a marked loss of contact with the general environment, and an unresponsiveness to any external stimulus until the post-hypnotic act is either in progress or has been completed. Even after the trance state has ceased, these manifestations, somewhat modified, continue as residual effects upon the subject and result in the intent, rigid, and almost compulsive nature of his behavior, and his state of absorption and general unresponsiveness until he has reoriented himself to the immediate situation.

Similarly, to a slight degree, the disappearance of the trance state (or, to a much greater degree, the completion of the post-hypnotic performance) is marked by a brief interval of confusion and disorientation from which the subject quickly recovers by renewed close attention to the immediate situation. This confusion and disorientation become especially marked if, during the state of absorption in the post-hypnotic performance, there occurred any significant alteration in the general situation. In addition there is usually evidence of a partial or complete amnesia for the post-hypnotic act and the concurrent events of the immediate situation. In those instances in which the subject does have a recollection of the course of events, investigation will disclose his ~~memories~~ to be hazy, faulty, and frequently more deductions than memories, based upon his interpretations and rationalizations of the situation to which he has reoriented himself. Occasionally, a subject may recall clearly the entire post-hypnotic performance despite poor recollection of or complete amnesia for the attendant circumstances but will regard it merely as an isolated, unaccountable, circumscribed impulsion or, more often, a compulsion having no connection with the immediate situation.

Illustrative of many of these points is the following account given in a hesitating, uncertain fashion by a subject upon the completion of a post-hypnotic act:

We were talking about something, just what I've forgotten now, when I suddenly saw that book and I simply had to go over and pick it up and look at it—I don't know why—I just felt I had to—a sudden impulse, I suppose. Then I came back to my chair. It just happened that way. But you must have seen me because I must have had to walk around you to get it—I don't see any other way I could have reached it. Then when I laid it down again, I must have put those other books on top of it. At least, I don't think anybody else did, since I don't remember anybody else being on that side of the room—but I wasn't paying much attention to anything, I guess, because, although I know I looked carefully at that book and opened it, I don't even know the author or the title—probably fiction from the looks of it. Anyway, it was a funny thing to do—probably an impulse of the moment and doesn't mean a thing. What was it we were discussing?

THE DEMONSTRATION AND TESTING OF THE SPONTANEOUS POST-HYPNOTIC TRANCE

ALTHOUGH THE VARIOUS FORMS of behavior spontaneously manifested by the subject in relation to post-hypnotic acts constitute a demonstration of a trance state, their brevity and self-limited character necessitate special measures for a satisfactory examination and testing of their significance.

This may be done readily without significantly altering the hypnotic situation, since the hypnotic signal serves to reestablish the original state of rapport existing at the time the post-hypnotic suggestion was given. Such a demonstration requires

a considerable degree of skill. Usually, it is most effectively done by some form of interference, either with the post-hypnotic act itself or with the subject after the post-hypnotic response has been initiated but not completed. The demonstration of the trance state may follow one of two courses, depending upon the presence or the absence of hypnotic rapport between the demonstrator and the subject. If there be a state of rapport, the interference may be directed either to the subject or to his performance; the trance manifestations are of the positive responsive type characteristic of the relationship between hypnotist and subject. In the absence of rapport, effective interference must be directed primarily to the act itself; then the trance manifestations are of the negative, unresponsive type characteristic of the hypnotized subject's unresponsiveness to and detachment from that which is not included in the hypnotic situation. In both instances, the general and specific behavior obtained is wholly in keeping with that which would be obtained under similar circumstances from the same subject in an ordinary induced hypnotic trance.

The interference most effective in demonstrating the trance is that offered by someone in rapport with the subject when the post-hypnotic response by some measure counteracting or altering original post-hypnotic suggestion, or to compelling the subject to give special attention to the hypnotist: For example, the deliberate removal of the object which the subject was instructed to examine; the manipulation of the subject in such a fashion as to effect the development of catalepsy in one or both arms, thus rendering the examination difficult or impossible; or the use, even with naive subjects of such vague verbal suggestions as, "*Wait a moment, just a moment,*" "*Don't let anything change now.*" "*Stay as you are right now, never mind that,*" "*I'd rather talk to you now,*" or, "*I will be waiting as soon as you have done it,*" and similar remarks implying that an additional assignment may be made.

The effect of such interference is usually a complete arrest of the subject's responses followed by an apparent waiting for further instructions; his appearance and manner suggest a state identical with that of the deep trance as ordinarily induced, and all the customary phenomena of the deep hypnotic trance can be elicited. Then, if he is allowed to return to the performance of the post-hypnotic task, a spontaneous awakening will ensue in due course, permitting an immediate and direct contrast of waking and hypnotic behavior as well as demonstration of an amnesia for the post-hypnotic act, the interference, and the events of the trance state. If no use is made of the peculiar state of responsiveness established by the interference, the subject tends to return to the post-hypnotic task. The sequence of his behavior thereafter is as if there had been no interference, but there is a marked tendency for the spontaneous trance state to persist until the post-hypnotic task has been completed. Especially is this true if the interference has rendered the task more difficult. Occasionally, instead of being arrested in his behavior, the subject may proceed uninterruptedly with his post-hypnotic task, and upon its completion appear to be awaiting further instruction. The phenomena of the deep trance state can then be elicited; if this is done, it becomes necessary to awaken the subject at the finish.

To illustrate, a subject was told that, shortly after his awakening, a certain topic of conversation would be introduced, whereupon he was to leave his chair immediately, cross the room, pick up a small statuette with his left hand and place it

on top of a certain bookcase. As the subject stepped in front of the hypnotist to cross the room, his left arm was gently raised above his head, where it remained in a cataleptic state. The subject continued on his way without hesitation, but upon approaching the statuette found himself unable to lower his left arm and turned to the hypnotist as if awaiting further instruction. Thereupon, he was used to demonstrate a variety of the usual phenomena of the ordinary induced trance. Upon the completion of this demonstration, he was instructed simply, "*All right, you may go ahead now.*" In response to this vague suggestion, the subject returned to the interrupted post-hypnotic performance, completed it, and resumed his original seat, awakening spontaneously with a complete amnesia for all of the events intervening between the giving of the cue and his awakening, without even an awareness that he had altered his position in the chair.

This same procedure of interference was repeated with another subject. But when the hypnotist made no response to the subject's expectant attitude, there occurred a fairly rapid disappearance of the catalepsy, a performance of the task, and a return to his seat, followed by a spontaneous waking with a complete amnesia for the entire experience.

SPECIAL TYPES OF SPONTANEOUS POST-HYPNOTIC TRANCE BEHAVIOR

IF THE INTERFERENCE is not given at the proper moment, while it usually intensifies and prolongs greatly the spontaneous trance, the subject may respond by bewilderment and confusion succeeded by a laborious compulsive performance of the post-hypnotic act and an overcoming of the interference. He may misinterpret the interruption of his task as a coincidental and meaningless, though obstructive, occurrence which is to be disregarded; or he may behave as if there really had been none.

This last type of behavior is of a remarkable character. It appears in other connections than the situation of mistimed interference, and may serve widely different purposes. It may occur when the interference is limited to demonstrating the trance state without affecting the actual performance of the post-hypnotic act: the subject merely ignores the most persistent efforts on the part of the hypnotist, completes his post-hypnotic task, and awakens spontaneously with a total amnesia for the entire occurrence. Frequently, it develops when the possibility of the post-hypnotic act has been nullified and when the post-hypnotic suggestion is rendered objectionable to the subject or too difficult as a result of the interference. Of most interest is its tendency to occur almost invariably when, upon the initiation of the post-hypnotic behavior, some person not in rapport with the subject intrudes into the situation with interference directed primarily to the post-hypnotic act.

Although these situations differ greatly, the pattern of the subject's behavior is essentially the same for all of them and is exemplified in the following accounts:

At the previously established post-hypnotic cue, the subject glanced across the room at an easily visible book lying on a table and proceeded to rise from his chair for the purpose of securing the book and placing it in the bookcase in accord with post-hypnotic instructions. As he shifted his position in his chair preparatory to rising, an assistant (not in rapport with the subject) quickly removed and concealed the book when the subject's gaze was directed elsewhere. Despite this

absolute interference with the post-hypnotic act, the subject unhesitatingly performed the task by apparently hallucinating the book, and gave no evidence of any realization that something unusual had occurred. This same procedure repeated with other subjects has led to an even more hallucinatory and delusional response: noting that the book had vanished, glancing at the bookcase in a bewildered fashion, and then apparently hallucinating the book in the place suggested for it and assuming that they have just completed the task. As one subject spontaneously explained:

It's funny how absent-minded you can get. For a minute there, I intended to put that book in the bookcase, when actually I had just finished doing so. I suppose that's because it annoyed me so much just lying there that the thing before my mind was the doing of it, and that I hadn't got around yet to knowing that I had already done it.

Upon resuming her seat she spontaneously awakened, and demonstrated a total amnesia inclusive even of her explanatory remarks.

Repetition of the procedure with the removal of the book effected while the subject's gaze was directed at it sometimes led to similar results. The removal of the book was not detected, thereby indirectly disclosing the defectiveness of the hypnotic subject's contact with the external environment and tendency to substitute memory images for reality objects, behavior highly characteristic of the hypnotic state. In other instances, the new position of the book was detected and the original position regarded as an illusion. In some cases, plausible misconstructions were placed upon the new position or the detected movement. For example: "*Why, who left this book lying in this chair? I remember distinctly seeing it on the table,*" or, "*I've been expecting that book to slip off the pile on the table all evening and at last it has. Do you mind if I put it in the bookcase?*" Depending upon the actual experimental situation, the real or an hallucinatory book would be recovered and the post-hypnotic act performed with the customary sequence of events.

Following this type of post-hypnotic behavior, there develops either a complete amnesia for the post-hypnotic act and the attendant circumstances, or less frequently, a peculiar admixture of amnesia and fragmentary memories. These partial memories often tend to be remarkably clear, vivid and distracting in character; they may relate to the facts or to the hallucinatory and delusional items of the post-hypnotic trance period. For example, the last subject quoted above recalled only that the hypnotist had a habit of piling books, papers, folders, and journals in untidy heaps, but she was unable to give a specific example of this practice. Another subject remembered most vividly minute and irrelevant details about goldfish in the fish globe used only as a part of the environmental setting for the post-hypnotic act and was most insistent that these memories constituted a complete account of the entire occurrence. Some weeks later, the subject disclaimed any memory of having made such statements.

THE EFFECT OF TIME ON THE DEVELOPMENT OF THE SPONTANEOUS POST-HYPNOTIC TRANCE

ONE OTHER GENERAL CONSIDERATION in relation to the development of a spontaneous trance upon the initiation of post-hypnotic behavior concerns the possible effect of the lapse of time. Subjects have been given specific instructions in the

form of a post-hypnotic suggestion to perform some simple act, the nature of which varied from subject to subject. This act was to be "done without fail on the occasion of our next meeting." Among these subjects were some who were not seen for months; all carried out the post-hypnotic act, developing a spontaneous trance as they did so. Two subjects were not seen until three years later and another two were not seen for four and five years respectively, during which time there was no form of contact between the hypnotist and the subjects. Nevertheless, at chance meetings with them, the performance of the post-hypnotic act and the development of a concomitant spontaneous trance state occurred.

APPARENT EXCEPTIONS TO THE RULE OF SPONTANEOUS POST-HYPNOTIC TRANCES

IT MAY BE WELL to offer an explanation of the apparent exceptions to the development of a spontaneous trance in relation to the execution of post-hypnotic suggestions.

These exceptions in which there is a post-hypnotic performance without the apparent development of a spontaneous trance usually arise from the following conditions:

1. Failure of the development of an amnesia for the post-hypnotic suggestions: In this situation, there may be no post-hypnotic performance as such, since the subject understands from the beginning the underlying motivations and cause of his behavior, and hence acts at a level of conscious awareness. Consequently, the performance becomes similar in character to one suggested to a person in the ordinary waking state and is "post-hypnotic" only in its time relationships.

In such instances, the act is essentially voluntary in character, although frequently another element may enter into the situation; a sense of being compelled to perform the specified task, despite the subject's apparently complete understanding of the situation. Thus the subject may remember his instructions and be fully aware of what he is to do and why he is to do it, and yet experience an overwhelming compulsion that causes him to perform the act with literally no choice on his part. Occasionally, the subject responding to this compulsion develops a spontaneous trance, as he performs the task. This trance often serves to establish a more or less complete amnesia for the instructions, the waiting period with its usually unpleasant compulsive feelings, and the act itself. The trance is similar to that which develops in the ordinary post-hypnotic situation, except that the amnesia it may cause tends to be more limited. The subject may remember the post-hypnotic suggestions, the period of waiting, and the feeling of compulsion, but have a complete amnesia for the post-hypnotic instructions but remember experiencing a compulsion to perform an apparently irrational act. In some instances, the spontaneous trance serves as a defense mechanism against the compulsive feelings rather than an integral part of the atypical post-trance performance. The development of compulsive feelings constitutes a marked alteration of the subject's entire pattern of behavior.

2. Failure to make clear to the subject that the post-hypnotic instructions given concern the act itself and not the process of making provision for such an act: the subject instructed to perform a certain task post-hypnotically may, after awakening, go through a mental process of realizing, sometimes vaguely, sometimes clearly, that a certain act is to be performed and then simply hold himself in readiness for

that act. Upon the performance of the task, no spontaneous trance occurs. However, close observation of the subject in this situation will disclose that a spontaneous trance invariably accompanies this process of making ready for the act provided this understanding of his task occurs definitely after the subject has awokened. If it occurs while he is going through a slow process of awakening, the situation would become similar to that of the failure to develop amnesia.

3. Insistence by the subject on performing the post-hypnotic act as a deliberate act of his choice: For some reason or whim, the subject may object to the purely responsive character of a post-hypnotic performance and make his response one of deliberate intention. In this situation, as in the foregoing example, there occurs upon awakening the same process of making ready for the suggested task; hence, the post-hypnotic performance is executed without the development of a spontaneous trance. However, this process of making ready is again accompanied by a spontaneous trance.

4. Failure of amnesia for all trance experiences: This is the most common in the spontaneous recollection of events and experiences of the trance state. The subject instructed to perform a post-hypnotic act at a given time after awakening may begin to recall his various trance experiences before the specified time, among them the post-hypnotic instructions. This recovery of memories is motivated usually by a sense of curiosity, and it is free from any purposeful significance in relation to the actual suggested post-hypnotic task. Literally, it is a breaking through of memories because of an inadequacy of amnesic barriers. With the recovery of the memory of the post-hypnotic suggestions, a similar situation obtains as exists when there is a failure of the development of an amnesia for post-hypnotic suggestion, which has been described above. While this type of behavior is the most common, it is exceedingly difficult to understand because there is first an amnesia for and then a recollection of post-hypnotic instructions and because the memories are recovered in a fragmentary fashion.

The apparent or absolute failure to develop a spontaneous trance upon the initiation of the execution of a post-hypnotic performance does not necessarily constitute a contradiction of our observation. Rather, it implies that there may occur within the subject certain changes in the psychological situation. These may serve to transform the character of the post-hypnotic act itself and render it one for which the subject has a preliminary awareness as well as an understanding of its underlying nature and cause. Hence, the act becomes transformed into one post-hypnotic in time relationships only.

SIGNIFICANCES OF THE SPONTANEOUS POST-HYPNOTIC TRANCE

THE SIGNIFICANCES of the spontaneous trance state as an integral part of the execution of post-hypnotic suggestions are numerous and bear upon many important hypnotic questions. In particular, they relate to the establishment of objective criteria for trance states, the training of subjects to develop more profound trances, and the direct elicitation of various hypnotic phenomena without a preliminary formal trance induction. The post-hypnotic trance bears upon the general problem of dissociation, the various individual hypnotic phenomena such as rapport, amnesia, selective memories, catalepsy and dissociated states, and the general experimental and therapeutic implications of post-hypnotic phenomena.

THE SPONTANEOUS POST-HYPNOTIC TRANCE AS A CRITERION OF THE INDUCED HYPNOTIC TRANCE

THE SPONTANEOUS POST-HYPNOTIC TRANCE constitutes a reliable indicator of the validity of the original trance; it is apparently a phenomenon of sequence based upon the original trance and constitutes a revivification of that trance. Careful observation will often disclose continuance in the spontaneous post-hypnotic trance of the behavior patterns belonging to the original trance state. This is illustrated by the following example:

During a single hypnotic trance, the hypnotist gave a large number of unrelated post-hypnotic suggestions, each of which was to be performed later as a separate task in response to separate cues; during the course of the trance, the subject's state of rapport with two observers was made to vary from time to time by suggestions independent of the post-hypnotic suggestions. Subsequently, upon the execution of the post-hypnotic suggestions, the spontaneous trance states that developed showed remarkable variations: the subject, while always in rapport with the hypnotist, variously manifested rapport with one or the other or both or neither of the two observers. Subsequent checking of the record disclosed that the rapport manifested in each spontaneous post-hypnotic trance constituted an accurate reflection of the exact state of rapport existing at the time the particular post-hypnotic suggestion was given. The bearing of this finding upon the question of rapport is at once apparent.

Since then, investigative work has shown that proper wording of post-hypnotic suggestions may effect either a continuance or an absence in the spontaneous trance of the general behavior patterns belonging to the original trance state. Thus, post-hypnotic suggestions carrying an implication of a change of the situation may militate against the evocation of original trance behavior. Yet, the same suggestion so worded as to carry immediate as well as remote implications will usually serve to effect a continuance of the original trance behavior. To illustrate: During experimental work on this problem it was found that this wording of a post-hypnotic suggestion, "*As I jingle my keys, you will invariably . . .*" often served to cause a continuance in the spontaneous post-hypnotic trance of the behavior patterns belonging to the original trance, while, "*Tomorrow, or whenever I jingle my keys, you will invariably . . .*" would fail in the same subject to elicit the behavior patterns of the original trance (since this wording implied possible changes in the situation). Extensive work has shown that the behavior of subjects in carrying over the patterns of response belonging to the original trance is highly individualistic. Some almost invariably do so, others seldom or never, some almost wholly, others only in selected relationships, and the outcome of any experimental work is highly unpredictable, depending apparently upon the individuality of the subject as well as his immediate understandings. Hence, extreme care in wording suggestions is highly essential and it should never be assumed that the subject's understanding of instructions is identical with that of the hypnotist. Neither should there be the assumption that an identical wording must necessarily convey an identical meaning to different subjects. In other words, the "standardized technique," or the giving of identical suggestions to different subjects, described by Hull (6, p. 50), is not, as he appears to believe, a controlled method for eliciting the same degree or type of response, but merely a measure of demonstrating the general limitations of such a technique.

Another type of evidence concerning the validity of the original trance is the failure to develop a spontaneous trance when apparently executing a post-hypnotic suggestion, by subjects who were merely complaisantly cooperative, over-eager to believe that they were in a trance or for various reasons effectively simulated being hypnotized. In direct contrast to these subjects are those relatively rare persons who actually do go into a deep hypnotic trance but who, because of individual peculiarities, refuse to believe that they are or ever have been hypnotized. Invariably, this latter class of subjects develops a spontaneous trance upon the execution of post-hypnotic suggestions; an occurrence which in itself often constitutes an effective measure in correcting their attitudes and misunderstandings.

In studies directed to the detection of the simulation of trance behavior, the failure of a trance state to develop upon the execution of post-hypnotic suggestions discloses any simulations. Nor does sophistication and coaching in this regard serve to enable a satisfactory simulation of the spontaneous trance state. On many occasions, trained subjects, purposely kept unaware that the performance they were watching was one of deliberate pretense, have declared the apparent performance of a post-hypnotic act to be "*not right*," "*something wrong*," or have stated, "*I don't get the right feeling from the way he did that*," but without being able to define their reasons, since their own post-hypnotic amnesias precluded full conscious understandings.

In brief, on innumerable occasions and under a variety of circumstances, the spontaneous post-hypnotic trance has been found to be characterized by the individual phenomena of the original trance state in which the post-hypnotic suggestion was given, and to be an excellent measure of differentiating between real and simulated trances, especially so when the subject deceives himself by being over-cooperative. Likewise, it has been found to be an effective measure in aiding responsive hypnotic subjects who cannot accept the fact of their hypnotization for personality reasons. Also, it can be used to demonstrate effectively the individuality and variety of responses that may be elicited under apparently controlled conditions.

THE UTILIZATION OF THE SPONTANEOUS POST-HYPNOTIC TRANCE AS A SPECIAL HYPNOTIC TECHNIQUE

OF PARTICULAR IMPORTANCE is the utilization of the spontaneous post-hypnotic trance as a special experimental and therapeutic technique. Its usefulness is varied in character and relates to the intimately associated problems of avoiding difficulties deriving from waking behavior, securing new trance states, training subjects to develop more profound trances, and eliciting specific hypnotic phenomena without direct or indirect suggestions made to that end.

The method of utilization is illustrated in the following experimental account:

A five year old child who had never witnessed a hypnotic trance was seen alone by the hypnotist. She was placed in a chair and repeatedly told to "*go to sleep*," and to "*sleep very soundly*," while holding her favorite doll. No other suggestion of any sort was given her until after she had apparently slept soundly for some time. Then she was told, as a post-hypnotic suggestion, that some other day the hypnotist would ask her about her doll, whereupon she was to (a) place it in a chair, (b) sit down near it, and (c) wait for it to go to sleep. After several

repetitions of these instructions, she was told to awaken and to continue her play. This three-fold form of post-hypnotic suggestion was employed since obedience to it would lead progressively to an essentially static situation for the subject. Particularly did the last item of behavior require an indefinitely prolonged and passive form of response, which could be best achieved by a continuation of the spontaneous post-hypnotic trance.

Several days later, she was seen while at play and a casual inquiry about her doll was made. Securing the doll from its cradle, she exhibited it proudly and then explained that the doll was tired and wanted to go to sleep, placing it as she spoke in the proper chair and sitting down quietly beside it to watch. She soon gave the appearance of being in a trance state, although her eyes were still open. When asked what she was doing, she replied, "Waiting," and nodded her head agreeably when told insistently, "Stay just like you are and keep on waiting." Systemic investigation, with an avoidance of any measure that might cause a purely responsive manifestation to a specific but unintentional hypnotic suggestion, led to the discovery of a wide variety of the phenomena typical of the ordinary induced trance.

Catalepsy

The subject was asked if she would like to see a new toy the hypnotist had for her. Contrary to her ordinary behavior of excited response in such a situation, she simply nodded her head and waited passively for him to secure the new toy (a large doll) from a place of concealment. She smiled happily when it was held up to her view, but made no effort to reach for it. Upon being asked if she would like to hold it, she nodded her head agreeably, but still made no effort to take it. The doll was placed in her lap and the hypnotist then helped her to nestle it in her right arm, but in such fashion that the arm was in a decidedly awkward position. She made no effort to shift the position of her arm, but merely continued to look happily at the doll.

While she was so engaged, the hypnotist remarked that her shoestring was untied and asked if he might tie it for her. Again she nodded her head and the hypnotist lifted her foot slightly by the shoestrings so that the task might be done more easily. When her foot was released, it remained in the position to which it had been elevated.

She was then asked if she would like to put the doll in its cradle. Her only response was an affirmative nod. After a few moments wait, she was asked if she would not like to do so at once. Again she nodded her head, but still continued to wait for specific instructions. Thereupon the hypnotist told her to "go ahead," meanwhile picking up a book as if to read. The subject responded by repeated futile attempts to rise from the chair; but the catalepsy present, manifested by the continuance of the awkward position in which she was holding the doll and the elevation of her foot, prevented her from making the shift of position necessary for rising. She was asked why she did not put the doll in the cradle, to which she replied, "Can't." When asked if she wanted help, she nodded her head whereupon the hypnotist leaned forward in such fashion that he pushed her leg down. Taking her by the left hand, he gently pulled her to a standing position with her arm outstretched, in which position it remained upon being released. She immediately walked over to the cradle, but stood there helplessly, apparently unable to

move either arm, and it became necessary to tell her to put the doll in the cradle. With this specific instruction, the catalepsy disappeared from her arms and she was able to obey.

Rapport and Hallucinatory Behavior

The subject was then asked to return to her original seat, where she continued to gaze in a passive manner at the first doll in its chair. One of the hypnotist's assistants entered the room, walked over and picked up that doll and removed it to another chair. Despite the fact that the subject had her gaze directed fully at the doll, she made no response to this maneuver, nor did she appear to detect in any way the alteration of the situation. After a few moments, the hypnotist asked her what she was doing. She replied, "I'm watching my dolly." Asked what the doll was doing, she answered simply, "Sleeping." At this point, the assistant called the subject by name and inquired how long the doll had been sleeping, but elicited no response. The question was repeated without results, whereupon the assistant nudged the subject's arm. The subject immediately looked briefly at her arm and scratched it in a casual fashion, but made no other response.

Following this, the assistant secured the two dolls and dropped them into the hypnotist's lap. The subject was then asked if she thought both dolls liked to sleep, thereby causing her to shift her gaze from the empty chair to the hypnotist. She apparently failed to see the dolls in the new position, but when they were picked up and looked at directly by the hypnotist, she immediately became aware of them, glanced hesitatingly at the chair and then at the cradle, remarked, "You got them now," and seemed to be very much puzzled. Yet when the assistant quietly took the dolls out of the hypnotist's hands and walked to the other side of the room, the subject apparently continued to see the dolls as if they were still held by the hypnotist. An attempt on the part of the assistant to call the subject's attention to the dolls failed to elicit a response of any sort from her.

The subject's mother then entered the room and attempted to attract her attention, but without results. Yet, the subject could walk around, talk to the hypnotist, and see any particular object or person called directly to her attention by him although she was apparently totally unable to respond to anything not belonging strictly to the hypnotic situation.

Amnesia

The others were dismissed from the room, the dolls restored to the chair and the cradle respectively, and the subject to her seat, whereupon she was told to awaken. Immediately upon manifesting an appearance of being awake, the subject, returning to the initial situation, remarked in her ordinary manner, "I don't think dolly is going to go to sleep. She's awake." She was asked various casual questions about the doll, following which the hypnotist remarked that maybe the doll did not like to go to sleep in a chair. Immediately, the subject jumped up and declared her intention of putting the doll in its cradle, but when she attempted to do so, she manifested very marked bewilderment at the presence of the new doll in the cradle. There was no recognition of it, no realization that she had ever seen the doll before, and no knowledge that it had been made a gift to her. She showed the typical excited childish desire for the new toy, asking whose it was and if she might have it. The assistant then re-entered the room and picked up the doll whereupon the subject began addressing remarks to the assistant.

The assistant, replying to these, walked over to the chair and picked up the first

doll. The subject made full and adequate response to this, disclosing complete contact with her surroundings and a complete amnesia for all trance occurrences.

Repetitions of the procedure upon the subject under varying circumstances led to similar findings. Likewise, comparable procedures have been employed successfully with other naive and trained subjects of various ages.

This general type of technique we have found especially useful both experimentally and therapeutically since it greatly lessens those difficulties encountered in the ordinary process of inducing a trance, which derive from the need to subordinate and eliminate waking patterns of behavior. Once the initial trance has been induced and limited strictly to passive sleeping behavior with only the additional item of an acceptable post-hypnotic suggestion given in such fashion that its execution can fit into the natural course of ordinary waking events, there is then an opportunity to elicit the post-hypnotic performance with its concomitant spontaneous trance. Proper interference, not necessary in the instance cited above because of the nature of the post-hypnotic performance, can then serve to arrest the subject in that trance state.

To arrest the subject in the spontaneous trance and to have him remain in that state, the entire situation must be conducive to such a purpose, since any unwillingness on the part of the subject will cause him to become unresponsive and to awaken. Under favorable circumstances, the subject submits readily and fully to the new hypnotic situation in a passive responsive fashion. Repeated intensive inquiry of subjects while in such prolonged trance states has disclosed no understanding of how the trance was secured nor any intellectual curiosity about it, and usually little or no spontaneous realization that they are in a trance.

By this general measure, new trance states can be secured free from the limitations deriving from various factors such as the subject's mental act, deliberate conscious intentions regarding trance behavior, misconceptions, and the continuance of waking patterns of behavior. Under ordinary circumstances, the hypnotic subject obeying a post-hypnotic command is making a response to a suggestion of which he is unaware at a conscious level of understanding, and which belongs to another situation of which he is similarly unaware. He becomes so absorbed and automatic in his performance and so limited in his responses to his general environment, that there is no need for the retention of conscious attitudes and patterns of behavior. Instead, there is effected a dissociation from the immediate circumstances, more adequate and complete than can be achieved by suggestion in the usual process of trance induction. In brief, it is a phenomenon of sequence, is based upon the revivification of the hypnotic elements of another situation, and thus, is limited to hypnotic behavior.

The value of repeated trance inductions to secure more profound hypnotic states is generally recognized. This same purpose can be served more satisfactorily and easily by the utilization of the post-hypnotic performance and its concomitant trance. The post-hypnotic performance provides an opportunity to secure a trance state quickly and unexpectedly without the subject having any opportunity to prepare himself or to make any special and unnecessary adjustments. Instead, he suddenly finds himself in the hypnotic state, limited to patterns of response and behavior belonging only to that state. Training can be accomplished without a laborious process of effecting by suggestion a dissociation of waking patterns of behavior (provided the subject is willing to forego the passive participation constituting a part of the usual training procedure).

The direct evocation of specific hypnotic phenomena without recourse to suggestion has been illustrated in the experimental account above. While the same thing may be done in the ordinary induced trance, there has been frequent and often well-founded criticism to the effect that, many times, the hypnotic behavior elicited was a direct response to intentional or unintentional suggestions given during the trance induction or to unexpected constructions placed by the subject upon suggestions. Behavior so elicited is expressive only of the hypnotic tendency to automatic obedience and it is not a direct expression of the hypnotic state itself. Utilization of the spontaneous post-hypnotic trance permits a direct evocation of specific phenomena without the questionable effects of a long series of suggestions given during the process of induction.

In the therapeutic situation, the utilization of the spontaneous post-hypnotic trance possesses special values since it precludes the development of resistances and renders the patient particularly susceptible to therapeutic suggestions. Also, the amnesia following this spontaneous trance is less easily broken down by the patient's desire to remember what suggestions have been given, as is so often the case in induced trances. Hence, there is less likelihood of the patient controverting the psychotherapy. The spontaneous post-hypnotic trance permits an easy combination of waking and hypnotic therapy, often an absolute essential for successful results.

THE SPONTANEOUS POST-HYPNOTIC TRANCE AND DISSOCIATION PHENOMENA

CAREFUL OBSERVATION discloses consistently that post-hypnotic behavior simply erupts or "breaks through" into the conscious stream of activity and fails to become an integral part of that activity except at a retrospective addition.

A good illustration of this dissociation may be found in the following examples: As the subject was conversing casually with others in the room, he was interrupted in the middle of a sentence by the predetermined cue for a post-hypnotic act requiring a brief absence from the room. Immediately upon perceiving the cue, the subject discontinued the remark he was making, manifested typical post-hypnotic trance behavior, executed the act, returned to his chair, re-adjusted himself to his original position, went through a process of awakening, took up his remark and continued it from the exact point of interruption. Another subject, instructed to respond instantly to a sharp auditory stimulus serving as the cue for a post-hypnotic act, was interrupted in the middle of the pronunciation of a long word while casually conversing with others present. His performance of the post-hypnotic act was then interfered with and he was used for about 20 minutes to demonstrate a variety of hypnotic phenomena following which he was told to "go ahead." In obedience to this vague suggestion, the subject proceeded to complete his performance of the post-hypnotic act, returned to his original position, re-adjusted himself, awakened, completed the utterance of the interrupted word and continued in the same line of conversation, apparently totally unaware that there had been a lengthy interruption.

A subject similarly interrupted in the midst of rapid typing and used to demonstrate various phenomena, upon returning to his original position at the typewriter, awakened and unhesitatingly resumed his typing task without any need to reorient

himself visually. Apparently, he had held his orientation to his task in complete abeyance for ready resumption.

Subjects do not always return with such precision the original waking train of thought after a post-hypnotic performance. Sometimes it is picked up further along in the natural course of its development: a subject interrupted by post-hypnotic activity while reciting the first part of a poem continued upon awakening with the recitation of the last part, with a discoverable firm belief that the intervening stanzas of the poem had been recited. Some subjects show confusion illustrated by the subject who declared, "I've forgotten what I was just talking about," and required aid in renewing his remarks, but was found to believe that he had said more on the topic than was the fact. On other occasions, subjects have manifested a hazy awareness of the post-hypnotic act and have digressed briefly to remark about some unusual circumstance apparently just discovered (as if seeking an explanation of the peculiar change in the situation of which they had just become somewhat aware). But, on the whole, when the subject is left to re-adjust his behavior after an interpolated post-hypnotic performance, there tends to be a complete amnesia for the trance and its events and a return to the general situation with seemingly no awareness of any changes in it.

The post-hypnotic act and its spontaneously developed post-hypnotic trance offer an opportunity to study experimentally the problem of dissociation and the apparent continuance and independence of waking trains of thought during the trance state.

APPLICATIONS OF THE SPONTANEOUS POST-HYPNOTIC TRANCE IN EXPERIMENTAL WORK ON DISSOCIATION

THE CONDITIONS under which these observations were made were those of a general social gathering in which the topic of hypnosis was discussed in such fashion that the subjects were unaware of deliberate specific experimental intentions. Maneuvering of the conversation would lead to the recitation of a poem or the giving of some famous quotations by the subject or the carrying on of guessing games, thus permitting a demonstration of the continuance of the original waking trains of thought, despite any interruption that might be occasioned by post-hypnotic acts. Our general purpose in these informal settings was the avoidance of restrictions upon patterns of response that obtain when the subject is aware that his behavior is under direct scrutiny. In our experience, the necessity for the avoidance of overt study in hypnotic work cannot be overemphasized. The natural course of behavior rather than the limited formalized pattern that may be expected in a strictly laboratory setting usually proves the more informative. The failure of integration of hypnotically motivated behavior with ordinary behavior constitutes significant considerations for which there must be adequate provision in any experimental work involving both waking and post-hypnotic behavior. Hence, in studies directed to the investigation of the capacity to perform simultaneously different tasks, such as reading aloud in the waking state and doing mental addition as a post-hypnotic task, provision must be made to keep the tasks entirely independent and not contingent upon one another. While provision is easily made for the post-hypnotic activity, extreme care must be exercised to insure that the waking behavior derives

entirely out of a situation belonging wholly to the waking state and that the development of a spontaneous post-hypnotic trance does not interfere significantly with the waking behavior.

In Messerschmidt's experiment, mentioned previously, none of these provisions was made, which accounts for her unsatisfactory and inconclusive findings. One needs only to observe critically a subject in such an experimental situation as Messerschmidt devised to note the constant, rapid fluctuation from one state of awareness to another of a more limited character. The unsatisfactory results obtained under such conditions are not indicative of a lack of capacity on the part of the subject, but rather, they indicate the obstructive effects of the post-hypnotic trance developments and the interdependence of the two tasks. Accordingly, in experimental approaches to the concept of dissociation, the problem is actually one of devising a technique by which the independence of the tasks is maintained despite any simultaneity of the performances.

An adequate technique is one that limits the post-hypnotic act to a single aspect of an entire task, of which the post-hypnotic performance represents only the initiation or culmination of the unconsciously performed activity, while the consciously performed task derives wholly from the ordinary course of events belonging to the waking situation.

To illustrate this type of technique, the following examples may be cited:

A farm boy subject was instructed in the trance state that thereafter for a week, every time he pumped water to fill a certain watering trough which was out of sight and hearing from the pump (which was known by him to require 250 strokes of the pump handle to fill), he was to turn and walk to the trough the instant that it was full. Thus, the post-hypnotic act was an extremely limited part of a larger implied task, and any post-hypnotic trance manifestations would necessarily be limited to the specified post-hypnotic act.

A few days later, an agreement was made in the ordinary waking state that the subject would be relieved of a certain onerous task much disliked by him if he were able to spell correctly most of the words given him by the hypnotist, the words to be selected from his own school spelling book. To this, the subject agreed eagerly. As the spelling test started, the boy's father appeared, in accord with secret arrangements, and demanded that the watering trough be filled immediately. Accordingly, the spelling test was conducted at the pump, where, as the subject pumped, one word after another was given him as rapidly as he spelled them. Suddenly, the subject interrupted his spelling, ceased pumping, and turned and walked to the trough, his behavior typical of the post-hypnotic trance state. The trough was found to be full. Repetitions of the experiment elicited the same results. Independent counting of the pump handle strokes disclosed the subject to be keeping accurate count despite the task of spelling. Yet, repetitions of the experiment in which the subject was instructed to count the strokes silently as the post-hypnotic task itself, while spelling aloud as a conscious task, led to unsatisfactory results, confusion of spelling with counting. This admixture in his performance bewildered him greatly, since, as a consequence of his amnesia for the post-hypnotic suggestions, he could not understand his frequent utterance of a number in place of a letter in his spelling.

When an attempt was made to have this subject count the strokes and spell as simultaneous waking tasks, he was found to be totally unable to do so except by deliberate purposeful pauses and by a definite alternation of tasks. After much

effort in this regard, the subject spontaneously suggested, "I can guess the number of strokes better instead of trying to count them while I'm spelling." A test of this disclosed that the subject was able to "guess" accurately. When he was questioned later in the hypnotic trance, he explained that the "guess" was only a conscious belief or understanding on his part, and that he had actually counted the strokes in the same manner as he had in the original experimental trials.

In a similar experiment, a stenographer was told in the trance state that for the next week, while taking dictation, she would change pencils on the 320th word, the 550th word and 725th word. These instructions limited the post-hypnotic act to a very small aspect of the total task. During that time she took dictation from three psychiatrists, each of whom noted the phrases at which she changed pencils. Despite the fact that she used many combined word phrases (symbols combining two or more words), it was discovered by count later that she approximated the correct number closely, never exceeding an error of 10, and averaging an error of three words.

Another important item is the fact that each time she changed pencils at the specified number of words, the subject became confused, manifested briefly the evidences of a spontaneous post-hypnotic trance and had to have some of the dictation repeated to her. Nevertheless, she could change pencils elsewhere than on the specified words without any interruption of her writing. Her general behavior, except for the transient disturbances noted above, disclosed nothing unusual to the three psychiatrists, who (although unacquainted with the experimental situation) had been instructed to observe her behavior carefully and to give dictation at their customary speed, which ranged between 100 and 120 words a minute. Likewise, when the hypnotist himself gave her carefully timed dictation, no unusual behavior was noted except the transient disturbances in direct relation to the specified words.

Yet the same subject, instructed as the post-hypnotic task to count the words as they were dictated, failed completely both in her counting and in her writing, as might be predicted if full consideration were given to habituation and learning processes and attention factors, apart from the influence of post-hypnotic trance manifestations.

An attempt was made to have her perform the two tasks as a single waking performance, but she was found unable to divide her attention sufficiently both to count correctly and to attend to the dictation. However, when it was suggested to her that she attend only to the dictation, and merely "guess" when she reached the designated number of words, it was found that she could approximate the correct count. In a subsequent hypnotic trance, she explained that the permission to "guess" permitted her to dismiss the count from her "conscious mind" so that she "could do it subconsciously."

As a control measure for the above experiments, nonhypnotic subjects and hypnotic subjects who had not been used in this type of experimentation were asked to "guess" in similar experimental situations. Their replies in all instances were found to be calculated, inaccurate approximations based upon various general considerations such as time elapsed or the number of pages covered, rather than an attempt to make an actual count.

A slightly different approach to the problem of simultaneous tasks at different levels of awareness is the utilization of post-hypnotic suggestion simply to initiate

a form of behavior which then continues as an automatic activity not impinging upon the subject's conscious awareness.

To illustrate: Another stenographer was instructed in the deep trance that the appearance of the hypnotist in her office would constitute a cue for her left hand to begin automatic writing without her conscious awareness of it, and that this writing was to be discontinued immediately upon his departure. Thus, she was given post-hypnotic suggestions serving directly to initiate and to terminate a certain form of behavior. Repeatedly thereafter, whenever the hypnotist entered her office, she manifested briefly the development of a post-hypnotic trance with a definite disruption of her activities, particularly so if she were engaged in typing. Under such circumstances, the post-hypnotic trance would persist until she had been excused from one or the other of the two tasks. Care was taken, however, to enter her office frequently when she was taking dictation from one of the hypnotist's colleagues. In this situation, she would manifest a brief spontaneous post-hypnotic trance which would disrupt her immediate activity and this would be followed by a resumption of her normal dictation behavior, accompanied by a continuous automatic writing with her left hand, which would be done on the desk top, the desk blotter, or any handy sheet of paper. If no pencil were available, her hand would still go through writing movements. Upon the departure of the hypnotist from the office, there would again occur a brief spontaneous post-hypnotic trance resulting in a disruption of her normal dictation behavior and a discontinuance of the automatic writing.

There seemed to be no interference by the automatic writing with the conscious waking performance, although the automatic writing often included phrases from the dictation as well as other sentences and phrases related to other matters.

Nor did there seem to be any interference by the waking activity with the automatic writing. Each was done with the same degree of facility and legibility as when either constituted the sole task for the subject.

When an attempt was made to have this subject take dictation after she had been allowed to become consciously aware of the fact that her left hand was doing automatic writing, it was discovered that she could not take dictation successfully, nor could she do the automatic writing except by a process of alternating the tasks. When ample proof had been given to her that she had performed such tasks simultaneously in the past, she explained that she could probably do it if she were not asked to keep the automatic writing in mind while taking dictation, that she could take dictation adequately if she was permitted to "forget about the automatic writing."

In these three examples, the spontaneous post-hypnotic trance was limited to a minor aspect of the larger implied post-hypnotic task; hence its interference with the concurrent conscious activity was decidedly brief. Also, in each instance, neither of the two tasks performed simultaneously was contingent upon the other. The waking one derived entirely out of the routine course of ordinary waking events having no relation, however remote, to the trance state in which the post-hypnotic suggestions were given. In all instances, the subjects were entirely free to engage simultaneously in two wholly independent activities without the burden of a third task of coordinating them.

The essential technical consideration in the simultaneous performance of two discrete tasks, each at a different level of awareness, which is not ordinarily possible at a single level of awareness consists in the provision of some form of motivation

sufficient to set into action a train of learned activity which will then continue indefinitely at one level of awareness, despite the initiation or continuation of a different train of activity at another level.

SUMMARY

1. A SURVEY of the literature discloses that, although there had been frequent recognition that post-hypnotic suggestions lead to the development of a peculiar mental state in the hypnotic subject, there has been no direct study of that special mental condition. Neither has there been provision or allowance made for its existence and its possible significant influences upon results obtained from post-hypnotic suggestions.
2. The significant change in the subject's mental state related to the performance of a post-hypnotic act has been found to be the development of a spontaneous, self-limited post-hypnotic trance. This constitutes an integral part of the process of response to, and execution of, post-hypnotic commands.
3. The spontaneous post-hypnotic trance may be single or multiple, brief or prolonged. In general, it appears for only a moment or two at the initiation of the post-hypnotic performance and hence it is easily overlooked. Its specific manifestations and residual effects form an essentially constant pattern, despite variations in the duration of the separate items of behavior caused by the purposes served and individuality of the subjects.
4. Demonstration and testing of the spontaneous post-hypnotic trance are usually best accomplished at the moment of the initiation of the post-hypnotic performance by interference either with the subject or with the suggested act. Properly given, such interference ordinarily leads to an immediate arrest in the subject's behavior and a prolongation of the spontaneous post-hypnotic trance, permitting a direct evocation of hypnotic phenomena typical of the ordinary induced hypnotic trance. Occasionally, special types of hypnotic behavior may be elicited by interference given improperly or causing a significant alteration of the post-hypnotic situation.
5. The lapse of an indefinite period of time between the giving of a post-hypnotic suggestion and the opportunity for its execution does not affect the development of a spontaneous post-hypnotic trance as an integral part of the post-hypnotic performance.
6. Apparent exceptions to the development of the spontaneous post-hypnotic trance as an integral part of the post-hypnotic performances are found to derive from significant changes in the intended post-hypnotic situation which alter or transform it into one of another character.
7. The spontaneous post-hypnotic trance is a phenomenon of sequence, since it constitutes a revivification of the hypnotic elements of the trænce situation in which the specific post-hypnotic suggestion was given. Hence, its development is a criterion of the validity of the previous trance.
8. The spontaneous post-hypnotic trance may be used advantageously as a special experimental and therapeutic technique, since it obviates various difficulties inherent in the usual method of trance induction.
9. The post-hypnotic performance and its associated spontaneous trance constitute dissociation phenomena because they break into the ordinary stream of conscious activity as interpolations, and since they do not become integrated with the ordinary course of conscious activity.

10. Post-hypnotic suggestion may be utilized effectively to study the capacity to perform simultaneously two separate and distinct tasks, each at a different level of awareness, if adequate provision be made for the nature and character of post-hypnotic behavior.

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Hypnotic Investigation of Psychosomatic Phenomena; Psychosomatic Interrelations Studied by Experimental Hypnosis*

THIS PAPER PRESENTS AN ACCOUNT of various psychosomatic interrelations and interdependencies frequently encountered as coincidental phenomena during the course of hypnotic experimentation on normal subjects of which the literature on hypnosis makes little or no mention.

These coincidental phenomena are not those changes in psychological and somatic behavior that are common to all hypnotic subjects in profound trances, such as alterations in reaction time, sensory thresholds, muscular tonus and the like. They are distinct from such psychosomatic manifestations of the hypnotic trance and, in all probability, expressive of the interrelationships of hypnotically induced behavior and conditions within the trance state. That is, after a profound trance state has first been secured, specific hypnotic instructions can then be given to the subject to elicit responses of a particular sort and in a chosen modality of behavior. In addition to the suggested behavior, there may also be elicited as seemingly coincidental manifestations marked changes in one or another apparently unrelated modality of behavior. Equally significantly, hypnotic suggestions bearing upon one sphere of behavior may remain ineffective until, as a preliminary measure, definite alterations are first induced hypnotically in an apparently unrelated and independent modality of behavior. For example, effective hypnotic suggestions bearing only upon sensory responses would often elicit additional unexpected and apparently unrelated motor responses; or suggestions directed toward a sensory sphere of behavior would remain ineffective until hypnotic alterations in a seemingly unrelated motor sphere had been first induced.

These various interrelations were found to vary greatly from subject to subject and, to a lesser degree, for the individual subject, depending in a large part upon the nature of the experimental work in progress.

The findings included in this report were collected over a period of years from a large number of normal subjects. In most cases, they were an incidental part of the development of other research projects. Whenever possible, each of the various findings has been confirmed by further experimental work on the same and other subjects.

The findings to be reported are of two general types: The first consists of specific instances either observed repeatedly in the same subject and confirmed on other subjects or encountered from time to time in a number of subjects. The second consists of a case report of the psychosomatic interrelationships and interdependencies found to exist between vision, headaches of visual origin and hypnotically induced psychological states in which the subject was regressed to earlier age levels.

Report on the first type of psychosomatic interdependencies is difficult, since

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they constitute essentially individual manifestations which occur under a wide variety of circumstances and in many different associations. They are not constant in their appearance for all subjects in the same situation nor does the appearance of any one phenomenon necessarily signify the development of other possibly related phenomena in the same subject. The findings do tend to remain constant for the specific modality of behavior under investigation in the individual subject, although repeated hypnotic experiences progressively lessen the duration of phenomena likely to cause the subject discomfort.

Many of the findings to be reported below were originally made in relation to experimental studies on hypnotically induced states of deafness, blindness, color blindness, amnesia, analgesia, anesthesia and age regression.*

Briefly stated, these findings are that *the development of any of these special hypnotically induced states may lead, in addition to those phenomena properly belonging to it, to any one or more of a great variety of responses and manifestations belonging to other modalities of behavior* (e. g., the development of visual and motor disturbances when only hypnotic deafness is suggested.)

These phenomena will be listed under general headings, and specific examples will then be cited to illustrate the coincidental developments that may be seen in relation to various induced hypnotic states:

A. Altered visual behavior.

1. Decrease in visual acuity with blurring of vision and difficulty in reading.
2. Contraction of the visual field.
3. Difficulty in focusing gaze.
4. Decreased ability in depth and distance perception.
5. Subjective sense of colored vision, that is, addition of chromatic values to visual stimuli.

B. Altered auditory behavior.

1. Decrease in acuity.
2. Inaccuracy in localizing sound.
3. Distortions in perception of sound qualities.

C. Altered motor behavior.

1. General muscular incoordination.

2. Specific motor disturbances:

- (a) Paresis and paralysis
- (b) Apraxias
- (c) Speech disturbances
- (d) Dysmetria
- (e) Ocular fixation, pupillary dilatation, and nystagmoid movements.

D. Other types of altered behavior.

1. Analgesias and anesthetics.
2. Subjective reactions of nausea and vertigo.
3. Anxiety states and phobic reactions with their various physiological comitants.
4. Amnesias, usually circumscribed and specific.
5. Revival of forgotten patterns of behavior.

*By the latter is meant the hypnotic reorientation of normal subject to a previous period of life with a revivification of earlier patterns of behavior and with an amnesia for all experiences subsequent to the suggested age level.

It must be noted that while some subjects showed many of the phenomena listed above, other showed few or none, depending upon the specific type of experimentation. For example, one subject rendered hypnotically deaf might show many changes in visual, motor and other forms of behavior, but when rendered color blind might show only one or two disturbances in other fields of function. Another subject rendered hypnotically color blind might show many disturbances of motor behavior but no changes in the auditory sphere. Some of these alterations in behavior preceded the development of the hypnotic condition being suggested; some accompanied the development of that intended state; most frequently, they constituted a part of the total picture after the intended hypnotic condition had been established.

In presenting specific examples, an effort will be made to select the more typical and informative developments. There was usually a minimum of interference by the experimenter and little immediate investigation of the unexpected findings. There were two reasons for this: the feeling that more could be learned from simple observation of these spontaneous manifestations (which were not readily understood and recognized sufficiently to permit extensive experimental manipulation), and the fact that other experimental work was usually in progress.

One of the first instances observed was that of a hypnotically deaf subject polishing and repolishing his glasses and showing peering behavior, as if he could not see well. A written inquiry disclosed him to be unable to read the question although he examined the paper carefully as if trying to find the writing on it, which actually was somewhat faintly written. Finally, he handed it back to the experimenter in puzzled silence. He was handed a book and a paragraph was pointed at. The subject started to ask if he were to read but showed a startled reaction immediately upon speaking. This was followed by a puzzled repetition of his question as if speaking to himself, whereupon he asked the experimenter what was wrong. Again the pantomimed instructions to read were given but the subject seemed to experience great difficulty. He explained that the print was blurred, that the lighting of the room was very dim and made anxious inquiry about his voice since he could not hear it. Examination of his eyes showed widely dilated pupils. To prevent disruption of the experimental situation, the subject was reassured by the measure of writing a large script on a blackboard. Subsequently, the restoration of the subject's ability to hear restored his visual acuity and his pupils contracted to normal size.

Another hypnotically deaf subject showed a marked loss of peripheral vision and seemed to have preserved only central vision. Other subjects showed various degrees of peripheral visual loss, the exact degree of which could not be determined. These subjects also showed ocular fixation and seemed unable to move their eyeballs freely.

One hypnotically deaf subject was noted to shift his position, twist his body and head about and to make strained efforts whenever he attempted to look directly at an object. Inquiry disclosed that, whenever he tried to look closely at an object, it seemed to blur and to move back and forth as if alternately receding and advancing. Examination of his eyes showed a slow irregular alternating contraction and dilatation of his pupils.

Another subject, a psychologist, spontaneously discovered that he seemed to have lost his ability for depth and distance perception, a topic he was studying at the

time. He was permitted to investigate this to some extent with available apparatus and the results obtained indicated a definite decrease in his ability to judge distances. Similar results were obtained with one other subject untrained in psychology. Comparable was the behavior of another subject who became distressed by her tendency to over-reach or to under-reach when handed objects and she was most apologetic about her "clumsiness." The only explanation she could offer was that her body did not "feel right," that her arms and legs seemed numb and stiff and that she felt evidence of general motor incoordination and muscle weakness. Because of her emotional distress, extensive investigation could not be carried on without disrupting the general experimental situation.

A subject who had been used repeatedly and successfully in conditioned reflex experiments failed to develop a conditioned response based upon a painlight stimulus complex since he invariably developed a generalized anesthesia when rendered hypnotically deaf. Another conditioned reflex subject also invariably developed a progressive anesthesia when rendered hypnotically deaf.

Two subjects when hypnotically deaf were found to have a subjective sense of colored vision, explaining respectively that everything seemed to have a reddish or a bluish hue; they suspected the experimenter of secretly employing colored lights to achieve this effect.

Subjective feelings of nausea and vertigo invariably developed in one subject whenever a state of hypnotic deafness became well established for her. She rationalized this by explaining that her voice did not "feel right" in her throat, but the measure of keeping silent did not lessen her subjective distress. Additionally, she showed nystagmoid eye movements and pupillary dilatation. Restoration of hearing would immediately correct all of these deviations from the normal, and efforts to alleviate her distress tended to remove the hypnotic deafness.

Another subject, who developed hypnotic deafness satisfactorily, seemed to be unable to respond to instructions to recover his hearing. Much effort and investigation finally disclosed that, with the onset of hypnotic deafness, there occurred an extensive anesthesia. Until this anesthesia was corrected, he could not recover his hearing except through the experimentally unsatisfactory measure of awakening from the trance state. Several other subjects have shown a comparable inability to recover from induced behavior changes until the coincidental developments were first corrected, unless they were awakened from the trance state, usually an undesirable method since it disrupts the general experimental situation.

A peculiar circumscribed amnesia for anything pertaining to the radio was shown by one subject, a medical student, whenever he became hypnotically deaf. He readily detected the sound vibrations of the radio when he happened to touch it, showed a lively curiosity about it, but seemed incapable of understanding any information given him about it. He regarded the radio as some form of a "vibrator" such as might be used in physiotherapy and was obviously incredulous of the explanations given him by the experimenter. A possibly significant item from his past history related to many reprimands given him by his father for his neglect of his studies in high school because of his excessive interest in the radio. Restoration of hearing always corrected this amnesia.

Several other subjects showed somewhat similar circumscribed amnesias in that, while in the deaf state, they would be unable to call to mind items of memory otherwise readily accessible to them. One subject could never remember when deaf

a certain professor's name and another invariably forgot a certain street address. Comparable findings are reported in a special study on aphasia-like reactions from hypnotically induced amnesias (12). In the ordinary trance or waking states, none of these subjects showed special amnesic reactions.

More common in hypnotic deafness than the above manifestations were states of anxiety and panic, and phobic reactions with their various physiological concomitants of increased pulse and respiratory rates, tremors and excessive perspiration (4, 5). Usually these manifestations would be attributed by the subjects to the experience of finding themselves unable to hear; they would especially comment upon the unpleasantness of not being able to hear their own voice. Occasionally, a subject would show only increased perspiration, tremors, or other evidence of a state of tension which he would not be able to explain and which were apparently not accompanied by any feelings of subjective distress.

The time of appearance of these behavior disturbances varied greatly. Several subjects given suggestions to develop hypnotic deafness invariably showed a preliminary state of rigidity and immobility with generalized anesthesia. As the state of deafness became established, these preliminary manifestations slowly disappeared completely. Any attempt to prevent these preliminary manifestations seemed to preclude the development of deafness, but suggestions leading to such immobility and anesthesia hastened the appearance of deafness. Another subject was found to be resistant to suggestions of deafness until he had first been given suggestions for a generalized amnesia. Following this, deafness could be induced. In large part, the additional behavior disturbances seemed to be an essential part of the established state of deafness, and any disruption of them tended to disrupt the state of hypnotic deafness also. These general findings were found to be true for other special hypnotically induced conditions.

To summarize, the induction of hypnotic deafness in the normal subject may lead to the development of a variety of other behavior disturbances. These additional manifestations seem to constitute a part of the process of developing the suggested auditory disturbance or of maintaining it, or to be an expression of the imbalance of the psychophysiological functioning caused by the induced auditory disturbance.

In studies of hypnotic blindness, color blindness, amnesia, analgesia, anesthesia, age regression and post-hypnotic behavior, the coincidental phenomena, depending upon the exact nature of the experimental work in progress, were found to be essentially similar to those developing in relation to hypnotic deafness. Hence they will not be reported in full detail; instead, emphasis will be placed upon those instances found specifically in these special hypnotic states.

In hypnotic blindness, the coincidental phenomena tended to be limited to fear reactions with corresponding physiological concomitants. However, one subject showed a definite decrease in auditory acuity, another developed a marked increase in muscular tonus with a subjective feeling of stiffness and rigidity, while still another showed an extensive analgesia and anesthesia of the legs and arms which persisted throughout the state of visual disturbance. In one study, it was found that hypnotic blindness could not be induced except as the culminating feature of an induced acute obsessional hysterical state. In general, the feeling of helplessness these subjects experience, and their tendency to become frightened by the situation in which they found themselves, made experimental manipulations difficult.

Hypnotic color blindness, like hypnotic deafness, yielded a large variety of unexpected behavior disturbances. Foremost among these were emotional reactions of marked distress accompanied by increased pulse and respiratory rates, tremors and excessive perspiration. These seemed to derive primarily from the feelings of disorientation and confusion caused by the changed appearance of the experimental setting as a result of the visual disturbance. One subject became seriously distressed by her inability to recognize her dress as her own. Reassurances by the experimenter served to allay in large part these manifestations.

In the sphere of auditory behavior, two subjects with induced color blindness showed an inability to localize sound correctly; they commented spontaneously on their subjective feeling that the experimenter's voice did not seem to emanate from him and that it had changed markedly in its tonal qualities. Both were observed to turn their heads and listen in the wrong direction to unexpected sounds and fail to recognize and identify sounds ordinarily familiar to them. One subject became greatly interested in investigating the altered character of sounds, periodically interrupting her investigation to ask for reassurances to the effect that the experimenter had full control over the situation. A stopwatch was described as ticking in an unusually muffled way and the tapping of a pencil was regarded as having a "thick, dull" sound. The squeaking of certain door hinges familiar to her was found to be extremely unpleasant, having a peculiar shrill quality, although in the ordinary trance or waking state, she did not react unfavorably to that particular sound.

One special finding in relation to hypnotic color blindness was the unexpected discovery of two instances of synesthesia, the first of which has been reported upon briefly in the study of hypnotic color blindness (6). This instance was marked by a loss of conceptual values and meanings for the word *three* and its corresponding numeral upon the development of red color blindness. Restoration of color vision also restored the previously lost conceptual values. The second instance was an association of the color red with the numeral 7. Color blindness resulted in a feeling of unfamiliarity for that number despite its recognition, but there was no actual loss of conceptual values. The subject could not explain in what way the numeral 7 had changed. Additionally, this subject was found to show synopsia, in that certain sounds always carried a reddish color significance for her. Upon the induction of color blindness, these sounds lost their characteristics of warmth and familiarity; in some instances, she failed to recognize them, especially in connection with music. A phonograph record played for her was described as having an "incredible number of mistakes" and she wondered why such a recording should ever have been made. When these two subjects were rendered hypnotically deaf, the numerical concepts retained their chromatic associations.

In relation to post-hypnotic behavior and amnesia, a not uncommon finding was the development of a headache when the subject was given an unpleasant post-hypnotic task to perform or was asked to develop an amnesia. One example is that of a junior medical student who, because of previous experience as a subject, volunteered for a class demonstration. There were no unexpected manifestations until he was asked to develop an amnesia for all hypnotic experiences including the present one and to awaken with a firm conviction that he never had been hypnotized and that in all probability he could not be. The subject performed this task adequately but soon developed a severe headache which was readily removed by

simply letting him recover his memories. He later explained that he resented being asked to develop an amnesia for his past hypnotic experience and that he felt this resentment had caused his headache.

With other subjects who have failed to develop hypnotic amnesias readily, experience has disclosed that the measure of suggesting that they forget some unpleasant thing (to which suggestion the significant qualification is added "even though it causes you to have a headache") often enables the subject to develop additional amnesias previously impossible and without experiencing an associated headache. Some subjects react to amnesias by the spontaneous development of a headache; others show peculiar anesthesias upon the induction of amnestic states of even a limited character. One subject instructed to become amnesic for certain trance experiences developed a persistent anesthesia of her hands. This was discovered when she attempted to do some writing. Correction of her amnesia enabled her to write. However, this hand anesthesia developed only when she was given instructions to forget specific items and did not accompany spontaneous generalized amnesias.

Two female subjects to whom a phobia for cats had been suggested developed olfactory behavior changes. One of the subjects became hypersensitive to unpleasant and the other inexplicably interested in pleasant odors until the suggested phobia had been removed. However, suggested olfactory sensitivity did not result in phobic reactions.

Another subject to whom a general disorientation for time and place had been suggested developed a very definite speech defect and stammered, although he had no history of previous stammering. Several months later in another setting, the same subject was instructed to become equally confident that a certain specific event which had occurred only once had happened on two distinctly different days and to defend these beliefs emphatically. He again developed his serious stammering and, in addition, he became disoriented for time, place, and person with the exception of the experimenter. On another occasion, he was asked to forget that a friend of his had been sitting in a certain chair and to be most confident in his assertion that his friend had occupied an entirely different seat. The subject responded to this task by first developing a stammer but shortly this disappeared and was replaced by an amnesia for the identity of his friend. He was then given a book to read and after he had read aloud from it, he was told he would stammer on the next paragraphs. This stammering resulted in the recovery of the friend's identity.

In relation to hypnotic age regression, two subjects who are reported in another paper (10), when reoriented to a period of life antedating the development of certain food intolerances were enabled to enjoy the otherwise unacceptable food.

Several adult subjects when regressed to earlier childhood age levels have shown marked changes in their motor behavior (9). Two other such subjects wrote freely and easily with a backhand slant without error, although special inquiry disclosed that they had changed to a forward slope 15 and 18 years ago respectively. Another subject who habitually wrote with a backhand slope in the regressed state wrote with a forward slope. An inquiry proved that this change in her handwriting had occurred at the time of puberty. Efforts in the ordinary trance and waking states to secure duplications of their earlier patterns of writing resulted at best in only a fair approximation thereof with many errors.

In brief, the above instances illustrate how the hypnotic induction of disturbances

in any chosen modality of behavior is likely to be accompanied by disturbances in other modalities. These vary greatly in their nature and in their relationship to the primary induced behavior disturbance.

CASE REPORT

THE SUBJECT was a medical interne who suffered from a high degree of myopia. Whenever forced to do without his glasses, he developed severe headaches. Subsequent to his first hypnotic trance, it was learned that he had received his first pair of glasses at the age of 10 years on the recommendation of his school nurse because of his severe headaches from eyestrain. The original prescription for glasses had been changed for one less strong when he was about 14 years old and these he still wore. His mother, fortunately, had kept his first pair of glasses.

For demonstration purposes before a group, this subject was deeply hypnotized and then reoriented to an age of eight years and awakened in that state of regression.

Promptly upon awakening, he removed his glasses, refusing to wear them. When he was persuaded to wear the glasses he complained that they hurt his eyes. Shortly, he became resentful because, he explained, they made his head hurt and he could not see well. Accordingly, he was allowed to take his glasses off. He was then interested in a series of tasks all involving eyestrain, such as reading books held at the wrong distance, threading fine needles and the like. He cooperated readily for about an hour without subjective complaints. He was then immediately reoriented to his current age, awakened, and found to be free of subjective discomfort. As a control measure, he was subsequently asked to perform similar tasks in the ordinary waking state without his glasses; each time he developed a headache after about one half hour of effort.

A series of trances over a period of weeks then disclosed that the hypnotic regression of this subject to various age levels yielded the following pertinent findings:

1. At 8 and 9 year levels:
 - a. Refusal to wear both pairs of glasses and complaints that they hurt his eyes.
 - b. No subjective symptoms from deliberate eyestrain.
 - c. Denial of headaches at eight year age level but admission of occasional headaches at nine year age level.
 - d. No subjective symptoms when awakened from these age levels after eyestrain.
2. At 10-13 year levels:
 - a. Ready wearing of first but not of second pair of glasses.
 - b. Prompt development of headaches when induced to dispense with glasses.
 - c. Complaint of headache when induced to wear the second pair of glasses.
 - d. Persistence of headaches when awakened from the trance state after eyestrain.
 - e. Abolition of headaches when regressed to any previous age level after eyestrain had resulted in headaches.
 - f. Failure to reestablish headache abolished by reorientation to an earlier age by subsequent reorientation back to the age level at which the headache had been developed unless care was taken to specify the exact date.

3. At 14 and subsequent years:

- a. Recognition of first pair of glasses but subjective complaints when induced to wear them more than an hour. Ready wearing of second pair of glasses with no subjective complaints.
- b. Development of headaches upon eyestrain.
- c. Persistence of these headaches when awakened from the trance after such eyestrain.
- d. Abolition of headaches immediately upon regression to any earlier age by subsequent reorientation back to the age level at which the headaches had been developed unless care was taken to specify the exact date.

Control tests conducted in the ordinary trance and waking states disclosed the subject to be unable either to dispense with his current pair of glasses or to wear the first pair without soon developing headaches.

When the subject was informed of the experimental results, he was inclined to doubt their validity. He asked that the various procedures be repeated while a fellow interne acted as an observer to satisfy him that he could dispense with his glasses without developing a headache when reoriented to an earlier age. The repeat experimental results obtained confirmed the previous findings. The subject was much intrigued by the proof offered him that, in a certain psychological state, he could dispense with his glasses and he made repeated but unsuccessful efforts on his own initiative in the waking state to achieve comparable results.

These findings are comparable to those reported previously in an account of the apparent development of a state of unconsciousness during the reliving of an amnesic traumatic experience (3), and in the repeated observations that acquired food intolerances and phobic reactions are not manifested by subjects regressed to a period of life antedating those developments (10).

This case report shows that, contrary to the actual current physical status of the subject, there were positive and striking correlations between the nonwearing and wearing of glasses and the development of headaches in accord with past chronological physical states and experiences.

DISCUSSION

THESE RESULTS constitute an experimental demonstration of unsuspected and unrealized relationships that exist between various modalities of behavior, an understanding of which is most important in any effort to deal effectively with the complex symptomatology of psychopathological conditions. Particularly do these findings demonstrate that psychopathological manifestations need not necessarily be considered expressive of combined or multiple disturbances of several different modalities of behavior. Rather, they disclose that a disturbance in one single modality may actually be expressed in several other spheres of behavior as apparently unrelated coincidental disturbances. Hence, seemingly different symptoms may be but various aspects of a single manifestation for which the modalities of expression may properly be disregarded. Just as the hypnotically deaf subject manifested, as a part of his state of deafness, additional sensory or motor changes, so it may be that psychopathological manifestations involving several modalities of behavior are actually results of but a single disturbance in only one modality of behavior. Thus, the primary task in the therapy of various psychopathological conditions may be dependent upon an approach seemingly unrelated to the actual

problem, even as hypnotic deafness was sometimes best achieved by first inducing an anesthesia.

These experimental findings suggest that psychopathological phenomena cannot be understood in terms of the modality of their expression and manifestation alone, but that an understanding of them must be looked for in terms of their fundamental interrelationships and interdependencies.

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The Hypnotic Subject's Ability To Become Unaware of Stimuli*

THE EXPERIMENTAL STUDY of the unresponsiveness of deeply hypnotized subjects to ordinarily effective stimuli and, conversely, their responsiveness to purely suggested stimuli is a most difficult problem. The subject's necessary awareness and understanding of what he is or is not to do in such experimentation raises the important questions: In what part are the experimental results attributable to actual experimental processes within the subject? In what part are they only indicative of the subject's cooperation in manifesting behavior needed to achieve the suggested task?

Thus, a cooperative subject who accepts the hypnotic task of becoming unaware of the presence of a third person may presumably actually fail to perceive that person; or, despite an awareness, he may behave *as though* he did not perceive the individual in question. In the first instance, his behavior seemingly is not of *no* response; in the second, that of successfully *inhibited* responses. But this is an oversimplification of the problem. For lack of more definitive language, examples of comparable behavior from common experience will be cited because they illustrate various important considerations for an adequate understanding of this total problem.

The first is that of a person reading a book who falsely believes himself to be alone. While so absorbed, he may respond to a gentle touch as if it were an itch and react adequately to this understanding of the stimulation by scratching behavior. Yet his response to the stimulus in no way alters his unawareness of the presence of another person. Or he may behave as if annoyed by a fly, recognizing the external character of the stimulation but making a mistaken response to it. Such stimulation may be repeated until its persistent recurrence compels another type of response. If this leads to an awareness of the presence of another, the startle or fright reaction may be regarded as an outward culmination of the experiential process of developing that awareness.

A second example is that of the tired mother who sleeps soundly despite disturbing noises. Nevertheless, at the slightest cry from her baby, she rouses at once. Thus, in relation to certain types of stimuli, she is unusually alert despite her unresponsiveness to other and even similar stimuli.

A third example is the ability of jute mill workers and boiler factory employees to carry on conversations in relatively normal tones of voice despite the shop din. The newcomer in such a situation is often unable to hear clearly even loud shouting. With experience, one can learn to disregard the disturbing noises and carry on conversations without undue effort and strain.

The complexity of these examples presents serious obstacles to investigative study; any awareness by the subject of an experimental approach to such behavior would alter the situation completely for him and militate against reliable and infor-

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mative findings. One cannot determine how a subject would behave when he mistakenly believes he is alone if the subject knows that he is mistaken in that belief. Nor can a subject's lowered thresholds for certain stimuli be tested satisfactorily as such if he expects to be tested for alertness to those special stimuli. It is axiomatic that the subject in an experimental situation in which he knows what is expected of him tends to behave in accord with the experimental demands, so that any findings are the result of both the experimental procedure and the subject's readiness to yield such findings.

Hence, a naturalistic as opposed to a frank experimental laboratory approach is essential to a study of various psychological phenomena. Especially is this true in relation to many hypnotic phenomena wherein a subject's mere readiness to behave in a certain way may yield the same outward objective findings as would result from actual experiential processes of behavior. All the more so is the naturalistic approach indicated when the introduction of experimental methods or any awareness that behavior is being systematically studied may lead the subject to cooperate for the purposes of giving the "scientific" results apparently desired.

This account is a report of the procedures and results obtained in investigating certain hypnotic phenomena often described categorically as "selective sensory anesthesias." But such a descriptive term is not necessarily applicable since, as one subject aptly declared, "it is not a question of being unaware of stimuli but, rather, a giving of all attention to certain stimuli or to certain aspects of a stimulus complex without other stimuli entering into the situation."

The investigative procedure was a combination of the naturalistic and the direct experimental approaches carried out in an informal social setting. So far as the subject was concerned, the purposes to be served were obvious and understandable and only related to the social situation. The subject did not know that the apparent purposes were only secondary to the actual experimental objectives. In the second account, the experimenter himself did not realize that a second behavioral development was taking place until the results disclosed that fact, following which there was a simple utilization of the spontaneous developments.

In both instances, the experimental objective was the hypnotic subject's ability to become unresponsive or unaware, at visual and auditory levels, of the presence of selected persons at a social gathering. In the first report, the subject was given full instructions to become unaware of a certain person. After these suggestions had been repeated adequately and a sufficient amount of time had elapsed, they were intentionally made to include a second person. So far as the subject was concerned, the object was to demonstrate for a social group his unawareness of the presence of those two people. However, the actual experiential purpose was to contrast his behavior in response to each of those persons and to determine if the element of time itself played a significant role in the effectiveness with which he performed his task.

In the second report, the original object was merely a demonstration in a social situation of somnambulistic behavior. Fortunately, a chance incident so altered the situation that, contrary to all suggestions an unexpected demonstration was given of "selective deafness" and "selective blindness."

A serious misconception to hypnosis frequently encountered even among those who have had extensive experience is that hypnosis in some peculiar undefined fashion necessarily deprives a subject of his natural abilities for responsive, self-

expressive and aggressive behavior, and limits and restricts him to the role of a purely passive and receptive instrument of the hypnotist.

The fact that receptiveness and passivity can readily be used to induce those processes of behavior that result in a trance state does not signify that they constitute essential criteria of the trance condition itself. Rather, there should be recognition of the fact that the general tendency of the hypnotic subject to be passive and receptive is simply expressive of the suggestibility of the hypnotic subject and hence a direct result of the suggestions employed to induce hypnosis and not a function of the hypnotic state.

The mistaken assumption is often made that the hypnotic subject must display the same passive receptive behavior when in a trance that he displayed in the process of going into the trance. The fact that the hypnotic subject's psychological state of awareness has been altered constitutes no logical barrier to any form of self-expressive behavior within that general frame of reference: in addition to his usual abilities, the hypnotic subject is often capable of behavior ordinarily impossible for him.

In the following experiments, use has been made of the ability of hypnotic subjects to behave in full accord with their natural capacities. This was accomplished by a training procedure of first hypnotizing them deeply by a prolonged laborious technique that did not demand immediate results. Then situations were devised in which the subjects had ample time and opportunity to discover and to develop their abilities to respond to the demands made of them with as little interference from the hypnotists as possible. After such preliminary training in hypnosis, experiments like the following can be conducted with relative ease.

EXPERIMENT I

DURING THE COURSE OF A DEMONSTRATION of hypnotic phenomena before a medically trained group, the question of "negative hallucinations," (the inability to perceive actual stimuli) was raised privately to the hypnotist and it was decided to conduct an experiment for the group in the form of a simple demonstration.

The subject was deeply hypnotized and a somnambulistic state induced. She was instructed to look about the room carefully and become fully aware of those present. After she had scrutinized everyone carefully and identified them by name, she was told that shortly she would discover that Dr. A had left. It was emphasized that soon she would realize that she had been mistaken in thinking that A had been present. She was told that she would really know that A had originally intended to be present but had failed to arrive. This fact, it was explained, would account for her original impression that he had been present. These instructions were systematically repeated in various forms with increasing emphasis upon her full realization that A had not been there and, in all probability, would not be able to appear.

In the meanwhile, A withdrew quietly and unobtrusively into the background where he remained out of range of the subject's vision.

When it seemed that the subject understood fully the suggestions given to her, she was kept busy with various attention-absorbing tasks for about 20 minutes. She was then casually reminded that A had originally intended to be present but had been unable to come and would probably not be able to attend at all. When

she nodded in agreement, the original series of suggestions was repeated but this time in connection with Dr. *B*. When this second series had been fully impressed upon her, she was again given attention-absorbing tasks for two or three minutes while *B*, like *A*, remained quietly in the background. Then the same casual general reminder previously made in relation to *A* was repeated in connection with *B*. Approximately 25 minutes and 5 minutes elapsed from the giving of the suggestions relating respectively to *A* and to *B*.

Then the subject's attention was directed to the group and she was asked to identify those present. This she did readily, omitting both *A* and *B*. The group was then told quietly to challenge her statements and to break down her exclusion of those two gentlemen.

Very shortly, it became apparent that there was a marked difference in her behavior in relation to *A* and to *B*. She was apparently completely unaware of *A*'s presence, entirely at ease in offering the false explanation that had been given, and showed no evidence that his absence could be regarded as a debatable issue. In no way did she disclose any awareness of his presence.

In relation to *B*, her behavior was decidedly different. She showed definite avoidance responses, evidences of confusion and blocking, and seemed uncertain about the situation although emphatic in her assertion that *B* was not present. When told to look in *B*'s direction, there was a marked tendency to glance aside, or in looking slowly about the room, to skip *B* by a quick glance past him. None of this behavior was apparent in relation to *A*.

Upon a signal, both *A* and *B* joined in the general conversation. To *A*'s voice, no response by the subject of any sort could be detected by the group. To *B*'s voice, many partial responses were made, such as a slight involuntary turn of her head, puzzled looks, a spontaneous statement that she thought she heard someone speaking, and that she felt uncomfortable, as if all were not right. She resisted successfully the efforts of the group to break down her expressed conviction that *B* was not there; but her behavior suggested resistance to the development of an awareness or an inhibition of responses.

In connection with *A*, she displayed no need to resist since, for her, he simply was not there; there seemed to be neither responses nor need to inhibit responses.

After about 10 minutes of such investigation, the subject was again busied with various attention-absorbing tasks for 15 or 20 minutes. Then again, the group was told to investigate the situation.

This time, no difference was found in her behavior relative to *A* and *B*. So far as could be determined, she made no response of any sort to their presence. There was no avoidance behavior, no uncertainty, and no evidence of mental strain. She readily recalled the previous questioning and related that then she had had an uncomfortable feeling that *B* might have arrived without her awareness. This feeling had made her uneasy about the questioning and uncertain in her replies. She also recalled having thought that she had heard his voice but attributed this to her general state of confusion caused by her conviction that he was not there and a feeling that he might be secretly present.

When *A* and *B* joined in the questioning and discussion, none of the previous partial responses to *B*'s voice were made. Her behavior was as if they were actually absent.

Upon signals, both *A* and *B* lifted her arm and shook hands with her. She

became aware of this at once and looked down at her hand each time with an expression of amusement and interest. Questioned by the group about this, she explained with simple earnestness that, in all probability, she had been given some post-hypnotic cue which caused her unconsciously to respond as if she were shaking hands with someone. Her only uncertainty was whether or not there had been an actual movement of her hand or just a hallucinatory experience.

Promptly both *A* and *B* shook her hand again. She then explained that it was a genuine motor and visual experience even though the tactile sensations were hallucinatory since there was nothing touching her hand. In responding to the questions of the group, she made no effort to look around the body of either *A* or *B* but seemed to be looking through them. Questioning by the group elicited her understanding that a nodding of my head, actually a signal to *A* and *B*, was a signal for her to undergo some planned hypnotic experience, which she had now discovered to be the hallucination of shaking hands with someone.

[In elaboration of this point, results obtained with a number of other subjects may be mentioned: Instructed to remember carefully that a member of the audience was sitting in a certain chair, the subject would thereafter continue to see that person in the specified chair despite a change of position. However, the subject would readily detect the alteration in the location of that person's voice resulting from the change of position. Usually, the subject responds to this situation by scrutinizing the chair and the source of voice alternately. Several outcomes are possible: The subject may rationalize the altered location of the voice as an inexplicable phenomenon, fail to see the person in the new position and substitute a memory image for the actual person. Or the subject may discover that there has been a change of seat and will call the hypnotist's attention to the matter so that further instruction may be given. A third and not infrequent development is for the subject to discover the person sitting in both places and become confused as to which is the real person. In subjects trained in psychology or psychiatry, this becomes an interesting phenomenon to observe. The usual procedure followed by the subject is to suggest to himself that the person is to make some movement or to perform some act. The visual image does, and the real person does not. Occasionally, the subject merely studies the two figures to see which one tends to fade and blur and this is recognized as the visual image.]

The subject was instructed to perform aloud simple sums in addition, the numbers to be suggested by the members of the group. After a dozen such additions had been rapidly called to her, both *A* and *B* separately called numbers to her. No response of any sort could be detected. She merely sat quietly and expectantly, waiting for those members of the group who were present for her to call problems. Several repetitions of this failed to elicit responses to *A* or *B*. Nor did the measure of having *A* and *B* call the same and other numbers in unison with the others serve to confuse her. Apparently, she was selectively deaf to both of them.

Advantage was taken of a telephone call to tell her that *A* and *B* would arrive in exactly five minutes and her attention was directed to a clock. In about five minutes, she was observed to turn her head toward the door and to go through the behavior of watching somebody enter the room. Close observation of her eyeballs disclosed her to be watching apparently hallucinated figures entering the room and to glance over the available chairs. She was observed to go through the process of letting one select the chair where *A* was really sitting and the other select the chair

where *B* was sitting. She greeted them courteously and then her eye movements disclosed her to be watching them sit down in the selected chairs. Thereafter, both were fully present to her.

[Approximately 50 persons, most of whom had seen this type of hypnotic behavior but who had not been hypnotized have been asked to duplicate it in detail or to perform a comparable act. One simple procedure is as follows: The unhypnotized experimental subject is instructed to behave as if a selected third person actually present is absent. After he feels confident of his ability to pretend this, he is instructed to hallucinate or fantasy a picture of that person hanging on the wall. The unhypnotized subject goes through a mental process of hanging a fantasied picture with regard for good spacing on a wall usually remote from the third person. There is a definite quality of avoidance of the real object in his behavior.

The hypnotized subject, given the same task, hangs the hallucinatory picture on the wall in close proximity to the person presumably absent and with a disregard for proper spacing. Usually, the hypnotic subject recognizes that the picture should be hung elsewhere with regard to proper arrangement, but explains that, for some inexplicable reason, it seems best to put the picture where he has placed it (actually in proximity to the supposedly absent person). Thus, in contrast to the unhypnotized subject, a utilization of the real object rather than an avoidance response is made.]

Subsequently, the subject was questioned under hypnosis about the experiences described above. She explained that she had been convinced at first that *A* was present. This was followed by a state of mental confusion and uncertainty about his presence. Shortly, this confusion had resolved itself into a realization that *A* was not present but that she had only expected him to be there. While these ideas were developing, she had recalled identifying someone as *A*, and this had caused her some embarrassment and made her hope that no offense had been taken. This emotional distress had made her wish that the author would proceed with whatever plans he might have.

When suggestions were given her about *B*, a similar train of events began to develop but, while she was still confused and uncertain about him, the group began to question her. This had added to her confusion and uncertainty and made her most uncomfortable, a fact she had labored to conceal. The questioning about *A* she had not been able to understand. It seemed to be out of place and without basis since she was certain no one could know about her previous misunderstandings.

Following the interlude in which she had been asked to read aloud, this general confusion about *B* and her vague impressions of having heard his voice disappeared and she found herself at a loss to understand the purposes of the group in questioning her further. Not until the "hallucinatory" handshaking occurred did she realize that a hypnotic demonstration was occurring. With that understanding, she had developed a mild passive interest in the situation and had tried to meet whatever demands were made upon her as adequately as possible since this understanding explained fully her previous states of confusion.

No effort was made to correct these misinterpretations of the total situation which were left open to the possibility of future experimental developments.

SUMMARY

1. A DEEPLY HYPNOTIZED SUBJECT in a somnambulistic trance was instructed to become unaware of the presence of a selected person.
2. After proper suggestions to this end, a period of 20 minutes was allowed to elapse to permit the subject to develop that "mental set" or the neuro- and psycho-physiological processes necessary to such a state of unawareness.
3. The subject was instructed, as previously, to become unaware of a second person.
4. A period of time considered too brief for the development of a "mental set" was allowed to elapse.
5. Tests were made for behavioral responses in relation to the two selected persons.
6. The subject showed no responses to the first person but made many partial responses and avoidance reactions in relation to the second person.
7. A sufficient period of time was allowed to elapse for the development of the proper "mental set" in relation to the second person.
8. Testing disclosed the subject to be equally unresponsive to and unaware of both persons at visual and auditory levels.
9. Tactile stimulation by the selected two persons was misinterpreted as hallucinatory experiences possibly deriving from post-hypnotic cues.
10. The subject hallucinated the arrival of the selected persons and reestablished contact with them.
11. Subsequent questioning of the subject under hypnosis disclosed a persistence of an understanding of the total situation in full accord with the hypnotic suggestions rather than with the actual facts.

EXPERIMENT II

BEFORE A GROUP OF ASSOCIATES in the author's office, a well-trained subject was hypnotized deeply and given instructions to develop the somnambulistic state. He was told that, upon the development of this somnambulistic state, he was to establish full contact with the group and to act in every detail of his behavior as if he were actually wide awake. By his behavior, conversation and participation in group activities, he was to convince everybody that he was unquestionably wide awake and not in a hypnotic trance. However, when questioned directly as to whether or not he was in the trance, he was to reply honestly, readily, and directly.

After these suggestions had been repeated several times to instill his full understanding, and after he had been given about 20 minutes while sleeping deeply to develop the "mental set" essential to their performance, he was told to proceed with his task.

The subject responded by lifting his head, yawning, stretching and remarking that he felt rather sleepy, that apparently it was up to him to be a bit more lively.

This subject had a very charming personality, was a pleasing conversationalist, alert, responsive, and possessed of good wit and high intelligence. Immediately, one of the group asked him if he was asleep to which he replied:

"Yes, I'm very much asleep, sound asleep in a trance state, but you'll never be able to detect it. In fact, you're going to have a hard time proving in your own mind that I am

asleep. But if you wish you can ask Dr. Erickson or me and we will both tell you the truth, which is, that I am in a deep hypnotic trance. Would you like to talk to me and find out how a hypnotized subject can talk and act even though asleep?"

For about an hour, the subject kept the group busy asking questions or responding to questions put to him. The range of conversation was very wide. Books were discussed, the typewriter in the office was used by the subject upon request, jokes were told and the subject repeatedly demonstrated alertness and responsiveness to everything occurring in the office. Nevertheless, at every straightforward question about his status, the subject replied with the simple factual statement that he was in a trance, and to the experienced hypnotist, there were many indirect evidences of this fact. Usually when this question was asked of him, after making his straightforward reply, the subject would make his questioner the butt of jesting remarks. At the end of an hour, a medically trained colleague, Dr. C., who had had no experience with hypnosis stepped into the office, remarking that he had heard the sound of laughter and conversation and wanted to know if a hypnotic demonstration was taking place. The subject responded at once by asking *C* if it seemed to him that anybody appeared to be hypnotized. *C* answered in the negative but added that he hoped he might have a chance to see hypnosis. To this, the subject replied with the ambiguous statement that his best opportunity was to observe what was going on since the afternoon's plans called for nothing more than the present activities. Following this, the subject and *C* engaged in a casual conversation on various items, and shortly *C* left. Presently a second visitor, Dr. *D.*, entered the office. This doctor more or less regularly dropped in on Saturday afternoons, a fact well known to the subject; hence, he was not a totally unexpected visitor. As he entered the room and noted the group, he promptly asked if the author were demonstrating hypnosis. An affirmative reply was given and the subject suggested, since he knew *D* very well, that *D* look over the group and see if he could tell who might be a good hypnotic subject. *D* promptly replied that he knew the subject himself was well trained and that two others in the group had also been hypnotic subjects, and that it might be any one of the three or for that matter someone else in the group. One of the others then spoke up and asked the visitor if he thought anybody in the room was in a hypnotic trance. Since *D* had done some hypnosis himself and had often seen some of the author's subjects in somnambulistic trances, he glanced carefully about the room, sizing up each individual present, verbalizing comments as he scrutinized them and carrying on a casual conversation, asking general questions about how long the group had been gathered in the room, what work they had been engaged in during the morning and similar items. Finally, he remarked that if he were pressed to venture a guess, he would select the subject as the most likely choice for the afternoon's work and that he felt that this choice of possible subjects was probably in a somnambulistic state at the actual moment. Immediately, the subject asked him to justify his guess. *D*'s explanation was that there were certain rigidities in the subject's movements, a loss of associated movements, some lag between his speech and his gestures and head movements and a marked pupillary dilation. He also explained that the subject moved his arms and walked very much as if he were in a trance state. As *D* made these remarks, the subject flushed slowly, turned to the author apologetically, and expressed his regret that he had failed to obey instructions completely. Turning to *D*, he confirmed *D*'s guess and admitted that he was in a somnambulistic state. The subject was com-

forted about having betrayed himself by the author's pointing out that *D*'s own experience had enabled him to recognize certain evidences of the trance state ordinarily overlooked.

After a brief chat, *D* left and the group then busied itself with attempts to detect alterations in the subject's motor behavior. The two other subjects soon demonstrated an ability to single out some of these behavioral alterations, but the rest of the group experienced difficulty in doing so. As this investigation continued, the subject became increasingly successful in simulating the motor behavior of a person fully awake. Eventually, he succeeded in interesting the group in a general conversation and this was allowed to drift along ordinary social channels.

Unexpectedly, a third visitor from out of town whom the subject did not know, Dr. *E.*, dropped in for a brief visit. This arrival was totally unexpected by the author. Hence, it differed markedly from the visits of *C* and *D* inasmuch as they constituted something entirely within the usual course of events. For this reason, their visits could be regarded as legitimate extensions of the total office situation. The visit by *E* belonged to another, totally different and unexpected category of events. It was entirely outside the range of the situation the subject had been asked to meet. As this visitor approached the office door, which had been left open, his arrival was noted and he was immediately signaled to be quiet, wait outside the door and keep out of visual range of the others present. Watching for opportunities when the subject was engaged in discussing matters with one or another of the group, the author displayed to all except the subject a sheet of paper on which was written, "Ignore our new visitor, do not disclose any awareness of his presence." When all of the group had been warned and the subject's attention was distracted, the visitor was signaled to enter the room. He did so quietly and took his seat on the edge of the group. The subject was allowed to finish the discussion in which he was engaged with one of the group and was then asked to review the course of the afternoon's events, the seeming purpose being to summarize them for the benefit of the group.

Promptly and adequately, he reviewed the entire course of the demonstration. During this discourse, he was asked repeatedly to point out where the various members of the group had been sitting at different times. When he came to the time of the entrance of *C*, he pointed out how *C* had stood beside the secretary's desk alongside of which *E* was now sitting. He was asked why *C* remained standing when the secretary's chair was available; he explained that *C* had undoubtedly been busy and did not want to stay long enough to take a seat. He then continued his discussion up to the point of the arrival of *D*. He flushed as he recounted *D*'s recognition of his hypnotic behavior, and among other things, related that *D* had sat in the chair where *E* was then sitting. He was asked if he were sure that the chair had remained constantly in one position throughout the entire time. He declared this doubtful since it was a swivel chair and *D* had swung around repeatedly as he talked to the various members of the group. *At no time did he become aware of the presence of E.* When the subject had completed his summary, it was suggested that the group continue as previously.

When the subject's attention was taken up by a discussion with one of the group, *E* was signaled to join in the conversation. He did so readily, timing his remarks to coincide with those of another speaker. The subject replied readily to the other members of the group and did not seem to hear *E* or to be confused by simultaneity

of two utterances. This continued for some time but soon resulted in the group hesitating and faltering in their utterances when *E* spoke. This distressed the subject and he began scrutinizing the various members of the group. Shortly, he asked the author if there were something wrong. When asked his reason for this question, he replied that the others seemed to be ill at ease and uncertain in their behavior, that they turned their heads unexpectedly and then would halt the movement, that they did not seem to be acting normally. *E* promptly asked the subject what that might mean, but apparently the subject did not hear this question. The subject was assured that everything was all right, that he need not be concerned about the group since everything was going along satisfactorily *and that, no matter what occurred, it would all be of interest.* *Also, it was suggested that he might be interested to discover what the situation was.* (The generality of these and other instructions and statements was intentional, the purpose being to give the subject free opportunity to become aware of *E*. Furthermore, it was expected that he would do so since it was not realized how completely the subject had limited himself to the expected situation and thus excluded from awareness any unusual developments).

After still further conversation with the group, the subject turned again and stated that he had clarified the situation. The explanation he offered was in full accord with what he had seen at a previous hypnotic demonstration and was as follows: While his attention had been distracted, advantage had been taken of such an opportunity to induce somnambulistic states in all those present. He explained that, repeatedly, various members of the group would start to say something and then falter and hesitate, that they kept turning their heads and moving about in an uncertain way as if they were not quite certain what to do. This behavior, he added, was similar to what he had seen at other demonstrations when subjects had been induced to experience active hallucinations. He was asked if he were convinced of his explanation. Scrutinizing the group closely, he admitted that he did not see the usual evidences of the trance state, but that he could not conceive of any other explanation which would account for their peculiar behavior. He volunteered as a second possible explanation that secret instructions to the group to act in this way might have been given without inducing a trance state, but declared that he did not see how they could carry on such pretenses so effectively.

Here the question may be raised why the subject offered such a rationalization when he knew that he was in a trance state and, hence, that his state of awareness might be limited. The answer to this probably lies in the misleading effects of his previous experiences and in the fact that the total experimental situation compelled him to believe that he was fully aware of everything. Thus, there was no recourse for him except to offer an explanation in terms of established understandings and not in terms of unfamiliar and unexpected possibilities.

The subject was asked if he were willing to continue with his task of behaving as if he were wide awake and giving no evidence that he was in the trance state.

He again expressed his willingness, whereupon he was told to continue but to take care that his general behavior in no way betrayed that he was in a trance state although he was still, upon direct inquiry, to admit that he was hypnotized. The subject asked earnestly and worriedly if he were disclosing his hypnotic state by his general behavior but was promptly reassured by the general statement that whatever happened would unquestionably be most desirable. Care was taken in this instance, as well as all others, not to limit or to restrict the subject's possible re-

sponses. Rather, reassurances and instructions were worded generally so that the subject was at liberty to make any response for which the occasion arose. Similarly all instructions were given in general terms to permit a spontaneous development of the situation.

Shortly, he became interested in a conversation with a member of the group and at once a signal was quietly given to *E* who stepped over and lifted the subject's arm.

(Ordinarily there are two usual reactions to this type of maneuver: The subject may remain totally unaware of what has occurred and continue in his behavior without alteration except for the substitution of memories of tactile and visual images to permit him to feel and see his hand and arm in the original position. If the enforced hand movements serve to disrupt his general posture and become too forceful, he tends to experience discomfort as if originating in the shoulder. From this point on, he may proceed to discover the actual change in position of his arm, sometimes with, and sometimes without, an awareness of the person manipulating the arm.

Or, he may immediately detect the arm movement, become puzzled, and proceed to attribute it to hypnotic suggestion; or he may determine the actual state of affairs, depending upon the nature of the experimental situation. In the present situation, the subject was obligated to be aware of all motor behavior, hence his immediate response.)

The subject noticed at once that something was happening to his hand and arm. He flushed, glanced at the author in a somewhat frightened and guilty fashion, attempted to replace his hand in his lap, and then tried to resist the handshaking forced upon him. The silent interested scrutiny of the entire group distressed him. He explained in a worried fashion that he knew he should not display unusual motor behavior indicative of the trance state, but something had happened which he could not control, explain, or understand.

In speaking and in glancing at the members of the group, he made no effort to look around *E* nor did he seem to be aware that *E* kept stepping in front of him to block his line of vision.

Urged to describe what was happening, he explained that it seemed as if somebody were manipulating his hand—that the texture of the skin and strength of the grip that he seemed to sense made him feel that some man whom he could not see was present and shaking hands with him. Instead of being given any reply, he was asked if he were not, in utter violation of instructions, betraying by his general behavior that he was in a trance state. The subject flushed anew and his face again expressed guilt. He protested earnestly that he was doing the best he could, but that the situation had become inexplicable to him and that he did not understand what was happening, unless the author had, in some indirect way, given him special cues or hypnotic suggestions for which he had an amnesia.

While the subject waited for some reassuring or comforting answer, the author turned aside, greeted *E* and proceeded to introduce him formally to the entire group one by one. The subject watched this performance, apparently heard the remarks made and the replies of the group, but gave no indication of hearing *E*'s acknowledgments. Finally, stepping over to the subject, the author introduced *E* by saying with a rising inflection of the voice, "And this is Dr. *E*." The subject merely repeated the words as if they carried no meaning and stared blankly, making

no response to *E*'s courteous acknowledgment of the introduction. Thereupon, *E* clapped him jovially on the back. This caused the subject to whirl quickly in a startled fashion and to look about behind him. Seeing nobody, he stepped backward and leaned with his back against the bookcase as if protecting himself from further assault.

No further attention was paid to him for some minutes, and the entire group entered into a conversation with *E*. While they were so engaged, the subject was observed to study his hand, move his shoulders as if to feel again the clap on the back, and then study the behavior of the others and repeat in a puzzled fashion the acknowledgments of the introductions made by the members of the group.

After some minutes of such intense study with much puzzled looking at the author and at the group, the subject finally offered the explanation that everybody was acting as if someone else were present and that he himself had had tactile sensations such as would be experienced from actual contact with a person. He asked if this state of affairs was some sort of an experiment intended to induce him to hallucinate the presence of someone, or if there were actually some person present unknown to him as the result of his being in a trance. He reasoned that this latter possibility was not readily tenable since he had at once become aware of the arrivals of *C* and *D*. Therefore, the present situation was best explained as a result of indirect hypnotic cues and suggestions given to him, supplemented by careful and secret instructions to the group regarding their behavior. This, he declared, was quite likely since the afternoon session had been greatly prolonged, had dragged slowly at times and, furthermore, the group sometimes had acted uncertain in their behavior as if they did not know just what to do next. Even as he was making these remarks, *E* interrupted to explain that he now had to leave, and took his departure. The subject completed his remarks without noticing the intentional interruption by *E*, and seemed amused as he watched everybody apparently shaking hands with the empty air and saying good-bye. When, however, *E* stepped over and shook hands with him, he appeared at first bewildered, amused, and satisfied. He declared that he was right in his guess, explained that the elaborate shaking of hands was nothing more than a beautiful build-up of indirect suggestions to induce him to do the same thing and expressed his pleasure in noting how adequately he had unwittingly responded.

Following *E*'s departure, a general conversation was resumed. After the lapse of half an hour, the subject was awakened and thanked for his services. He was astonished to note the time and said that he hoped that whatever he had done during the course of the afternoon had proved satisfactory. Of this, he was fully assured.

The next day and on several occasions later, indirect casual remarks were made to evoke associations that might disclose some recollections of his trance experience. These elicited no positive results of any sort.

Subsequently, he was hypnotized and asked to recall the events of that afternoon. This he did adequately, except that he disclosed no awareness that there had been a third visitor, even though he recounted fully the seemingly inexplicable developments that had taken place.

Still later, in a deep trance, he was asked to do some crystal gazing and by this means to describe everything that had happened that afternoon in its correct chronological order. This he did adequately, and in much fuller detail than he had

previously recounted it verbally, but again there was the same unawareness of *E*'s presence.

During the process of crystal gazing, he hallucinated the remarks of the group and was much impressed by what he described as the excellence of the performance of their acting as if someone else were present. He repeatedly called attention to the faltering and hesitation the group showed in speaking as if someone else had started to speak at the same time. He also commented freely on the tendency of the group, as he visualized them in the crystal, to turn their heads and speak as if they were addressing someone who was not present.

No attempt was made to give him a true understanding. He was thanked for his careful work in crystal gazing and asked if he was satisfied with everything. When he stated simply that he was, the matter was dropped with the hope that sometime later, there might be other informative developments. However, to date, the subject remains, so far as can be determined, amnesic in the waking state for the events of that afternoon. In the trance state, there is still a persistence of his original understandings.

SUMMARY

1. FOR PURPOSES OF A GROUP DEMONSTRATION in the author's office, a deeply hypnotized subject was instructed to develop a somnambulistic state and in this state to simulate, as completely as possible, ordinary waking behavior but to state upon direct questioning whether or not he was in a trance.
2. After a lapse of sufficient time to permit the subject to develop what was considered an adequate "mental set" for this task, he was told to proceed.
3. The subject appeared to awaken and participated readily and capably in group activities, impressing everyone with his state of ordinary wakefulness. Direct questions elicited the acknowledgment that he was hypnotized.
4. The subject became aware at once of the separate, unplanned, and unanticipated arrivals of two persons well known to him who were frequent office visitors.
5. From one of these visitors, who had had no experience with hypnosis but was well aware of the subject's hypnotic work, the subject successfully concealed his trance state.
6. The second visitor, like the first, was fully aware of the general facts about the subject and was, in addition, experienced in hypnosis. After careful study of the entire group, this visitor recognized the subject's somnambulistic state and substantiated this discovery by pointing out significant characteristic hypnotic alterations of behavior.
7. After the departure of this visitor, the subject, apologetic because of his failure to perform the task satisfactorily and aided by the more critical observations of the group, made renewed efforts to simulate more effectively ordinary waking behavior.
8. There arrived, unexpectedly, an out-of-town visitor whom the subject did not know and who could not be considered a legitimate extension of the office situation, who was introduced unobtrusively into the general situation when the subject's attention was otherwise directed.
9. The subject remained consistently unaware of and unresponsive to this visitor

at both auditory and visual levels despite his full contact with the situation in other regards.

10. The altered behavior of the group in relation to this visitor was readily observed by the subject but was not understood by him, and he offered various rationalizations in explanation of it. These were in accord with his previous hypnotic experiences and his apparent immediate limitations of awareness.

11. Physical manipulation of the subject by this visitor evoked general manifestations in accord with his hypnotic condition. This caused the subject to develop startle and fright reactions and led him to express guilt feelings because he found himself uncontrollably violating instructions to behave as if wide awake.

12. Further instruction to behave fully as if wide awake did not enable the subject to become aware of the visitor, although the group increasingly manifested involuntary reactions to the visitor's presence.

13. The subject finally resolved his inability to understand the situation as it had developed for him by misinterpreting it as a planned and systematic use of indirect suggestions by the entire group to elicit involuntary hypnotic responses from him.

14. Subsequent questioning of the subject in the waking state disclosed an apparent amnesia for all trance events.

15. Inquiry under hypnosis elicited a ready verbal account of every thing except an awareness of the third visitor.

16. Crystal gazing by the subject resulted in a full detailed account but without the discovery of the presence of the third visitor. No effort was made to correct the subject's understanding of the total situation.

CONCLUSION

DEFINITIVE CONCLUSIONS cannot be drawn from two reports of behavior as complex as that which these subjects displayed. Nevertheless, the results obtained are not an atypical highly individualistic phenomenon; similar behavior may be reasonably expected, but not necessarily easily obtained, from other subjects under comparable conditions.

Neither can there be any extensive discussion of the possible nature and significances of these experimental results since they constitute an initial study of a most difficult problem, an understanding of which can be reached only by repeated successful studies variously controlled and yielding informative negative or positive results. It is to be noted that these experimental findings, so expressive of an altered state of awareness not ordinarily conceivable, are in accord with the findings made in other experimental hypnotic studies of induced deafness, color blindness, "regression states," amnesia, aphasia, anesthesia and post-hypnotic states. They are comparable in some degree to those common spontaneous limited restrictions of awareness seen in states of intense concentration, abstraction and reverie or in the failure to perceive something obvious because of a state of expectation of something quite different.

Certain general considerations, already mentioned in the introduction, may be reemphasized. The first of these concerns the investigative possibilities of this type of experimental procedure for certain complex psychological phenomena as contrasted to rigidly controlled experimental procedures which cannot provide for

unexpected spontaneous developments extending beyond the devised experimental situation. Often such unanticipated behavioral developments constitute the more significant findings and are of primary importance in the experimental study of complex and involved phenomena. When such behavior has been elicited, there is then an opportunity to devise rigidly controlled experimental conditions by which to define it in terms of a known situation, instead of attempting the difficult problem of trying initially to define the precise conditions under which presumably possible behavior might appear.

The second consideration relates to the variety of spontaneous volitional activities by deeply hypnotized subjects. These two reports disclose the capacity of hypnotized subjects to respond adequately to a given situation without being restricted or limited to the passively responsive behavior so often regarded as a criterion of the trance state. In other words, there seems to be no valid reason to expect the hypnotized subject to lose his capacities for spontaneous, expressive and capable behavior or to expect him to become simply an instrument of the hypnotist. The subject may more properly be expected to behave adequately within the situation that is established for him, and hence, even as these subjects did, to function as capably in the trance state as in the waking state.

The third consideration is the possible importance of neuro- and psychophysiological processes in eliciting extremely complex hypnotic behavior. It is hardly reasonable to expect a hypnotized subject, upon a snap of the fingers or the utterance of a simple command, to develop at once significant, complex, and persistent changes in his behavioral functioning. It is to be expected that time and effort are required to permit a development of any profound alterations in behavior. Such alteration must presumably arise from changes and processes within the subject, which are basic to behavioral manifestations, and not from the simple experience of hearing a command spoken by the hypnotist. One needs only to consider the marked neuro- and psychophysiological differences between the behavior of the hypnotized subject in an ordinary trance state and that of the unhypnotized subject to realize that still further developments in hypnotic behavior may be dependent upon additional and extensive changes in the neurological and the psychological functioning of the individual.

In brief, these two reports indicate that complex hypnotic behavior is not a superficial phenomenon elicited readily by simple commands, but that it is based upon significant processes of behavioral functioning within the subject and constitutes an experiential process for the subject.

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A Special Inquiry with Aldous Huxley into the Nature and Character of Various States of Consciousness*

INTRODUCTION

OVER A PERIOD of nearly a year much time was spent by Aldous Huxley and by the author, each planning separately for a joint inquiry into various states of psychological awareness. Special inquiries, possible methods of experimental approach and investigations and various questions to be propounded were listed by each of us in our respective loose-leaf notebooks. The purpose was to prepare a general background for the proposed joint study with this general background reflecting the thinking of both of us uninfluenced by the other. It was hoped in this way to secure the widest possible coverage of ideas by such separate outlines prepared from the markedly different backgrounds of understanding that the two of us possessed.

Early in 1950 we met in Huxley's home in Los Angeles, there to spend an intensive day appraising the ideas recorded in our separate notebooks and to engage in any experimental inquiries that seemed feasible. I was particularly interested in Huxley's approach to psychological problems, his method of thinking and his own unique use of his unconscious mind which we had discussed only briefly sometime previously. Huxley was particularly interested in hypnosis and previous exceedingly brief work with him had demonstrated his excellent competence as a deep somnambulistic subject.

It was realized that this meeting would be a preliminary or pilot study, and this was discussed by both of us. Hence we planned to make it as comprehensive and inclusive as possible without undue emphasis upon completion of any one particular item. Once the day's work had been evaluated, plans could then be made for future meetings and specific studies. Additionally, we each had our individual purposes, Aldous having in mind future literary work, while my interest related to future psychological experimentation in the field of hypnosis.

The day's work began at 8:00 a.m. and remained uninterrupted until 6:00 p.m. with some considerable review of our notebooks the next day to establish their general agreement, to remove any lack of clarity of meaning caused by the abbreviated notations we had entered into them during the previous day's work and to correct any oversights. On the whole we found that our notebooks were reasonably in agreement but that naturally certain of our entries were reflective of our special interests and of the fact that each of us had, by the nature of the situation, made separate notations bearing upon each other.

Our plan was to leave these notebooks with Huxley since his phenomenal memory, often appearing to be total recall, and his superior literary ability would permit a more satisfactory writing of a joint article based upon our discussions and experi-

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mentations of that day's work. However, I did abstract from my notebook certain pages bearing notations upon Huxley's behavior at times when he, as an experimental subject, was unable to make comprehensive notations on himself, although post-experimentally he could and did do so, though less completely than I had. It was proposed that, from these certain special pages, I was to endeavor to develop an article which could be incorporated later in the longer study that Huxley was to write. Accordingly, I abstracted a certain number of pages intending to secure still more at a later date. These pages that I did remove Huxley rapidly copied into his own notebook to be sure of the completeness of his own data.

Unfortunately, a California brush fire sometime later destroyed Huxley's home, his extensive library containing many rare volumes and manuscripts, besides numerous other treasures to say nothing of the manuscripts upon which Huxley was currently working as well as the respective notebooks of our special joint study. As a result, the entire subject matter of our project was dropped as a topic too painful to discuss, but Huxley's recent death led to my perusal of these relatively few pages I had abstracted from my notebook. Examination of them suggested the possibility of presenting to the reader a small but informative part of that day's work. In this regard, the reader must bear in mind that the quotations attributed to Huxley are not necessarily verbatim, since his more extensive utterances were noted in abbreviated form. However, in the essence of their meaning, they are correct and they are expressive of Huxley as I knew him. It is also to be borne in mind that Huxley had read my notations on the occasion of our joint study and had approved them.

PROJECT INITIATION

THE PROJECT began with Huxley reviewing concepts and definitions of conscious awareness, primarily his and in part those of others, followed by a discussion with me of his understandings of hypnotic states of awareness. The purpose was to insure that we were both in accord or clear in our divergences of understanding, thus to make possible a more reliable inquiry into the subject matter of our interest.

There followed then a review in extensive detail of various of his psychedelic experiences with mescaline, later to be recorded in his book. (Huxley, A. *The Doors of Perception*. New York: Harper and Brothers, 1954.)

Huxley then proceeded with a detailed description of his very special practice of what he, for want of a better and less awkward term which he had not yet settled upon, called "Deep Reflection." He described this state (the author's description is not complete since there seemed to be no good reason except interest for making full notations of his description) of Deep Reflection as one marked by physical relaxation with bowed head and closed eyes, a profound progressive psychological withdrawal from externalities but without any actual loss of physical realities nor any amnesias or loss of orientation, a "setting aside" of everything not pertinent, and then a state of complete mental absorption in matters of interest to him. Yet, in that state of complete withdrawal and mental absorption, Huxley stated that he was free to pick up a fresh pencil to replace a dulled one to make "automatically" notations on his thoughts and to do all this without a recognizable realization on his part of what physical act he was performing. It was as if the physical act were "not an integral part of my thinking." In no way did such physical activity seem

to impinge upon, to slow, or to impede "the train of thought so exclusively occupying my interest. It is associated but completely peripheral activity. . . . I might say activity barely contiguous to the periphery." To illustrate further, Huxley cited an instance of another type of physical activity. He recalled having been in a state of Deep Reflection one day when his wife was shopping. He did not recall what thoughts or ideas he was examining but he did recall that, when his wife returned that day, she had asked him if he had made a note of the special message she had given him over the telephone. He had been bewildered by her inquiry, could not recall anything about answering the telephone as his wife asserted, but together they found the special message recorded on a pad beside the telephone which was placed within comfortable reaching distance from the chair in which he liked to develop Deep Reflection. Both he and his wife reached the conclusion that he had been in a state of Deep Reflection at the time of the telephone call, had lifted the receiver and had said to her as usual, "I say there, hello," had listened to the message, had recorded it, all without any subsequent recollections of the experience. He recalled merely that he had been working on a manuscript that afternoon, one that had been absorbing all of his interest. He explained that it was quite common for him to initiate a day's work by entering a state of Deep Reflection as a preliminary process of marshalling his thoughts and putting into order the thinking that would enter into his writing later that day.

As still another illustrative incident, Huxley cited an occasion when his wife returned home from a brief absence, found the door locked as was customary, had entered the house and discovered in plain view a special delivery letter on a hallway table reserved for mail, special messages, etc. She had found Huxley sitting quietly in his special chair, obviously in a state of deep thought. Later that day she had inquired about the time of arrival of the special delivery letter only to learn that he had obviously no recollection of receiving any letter. Yet both knew that the mailman had undoubtedly rung the doorbell, that Huxley had heard the bell, had interrupted whatever he was doing, had gone to the door, opened it, received the letter, closed the door, placed the letter in its proper place and returned to the chair where she had found him.

Both of these two special events had occurred fairly recently. He recalled them only as incidents related to him by his wife but with no feeling that those accounts constituted a description of actual meaningful physical behavior on his part. So far as he knew, he could only deduce that he must have been in a state of Deep Reflection when they occurred.

His wife subsequently confirmed the assumption that his behavior had been completely "automatic, like a machine moving precisely and accurately. It is a delightful pleasure to see him get a book out of the bookcase, sit down again, open the book slowly, pick up his reading glass, read a little, and then lay the book and glass aside. Then some time later, maybe a few days, he will notice the book and ask about it. The man just never remembers what he does nor what he thinks about when he sits in that chair. All of a sudden, you just find him in his study working very hard."

In other words, while in a state of Deep Reflection and seemingly totally withdrawn from external realities, the integrity of the task being done in that mental state was untouched by external stimuli, but some peripheral part of awareness made it possible for him to receive external stimuli, to respond meaningfully to them but

with no apparent recording of any memory of either the stimulus or his meaningful and adequate response. Inquiry of his wife later had disclosed that when she was at home, Aldous in a state of Deep Reflection paid no attention to the telephone which might be beside him or the doorbell. "He simply depends completely on me, but I can call out to him that I'll be away and he never fails to hear the telephone or the doorbell."

Huxley explained that he believed he could develop a state of Deep Reflection in about five minutes but that in doing so he "simply cast aside all anchors" of any type of awareness. Just what he meant and sensed he could not describe. "It is a subjective experience quite" in which he apparently achieved a state of "orderly mental arrangement" permitting an orderly free flowing of his thoughts as he wrote. This was his final explanation. He had never considered any analysis of exactly what his "Deep Reflection" was nor did he feel that he could analyze it, but he offered to attempt it as an experimental investigation for the day. It was promptly learned that, as he began to absorb himself in his thoughts to achieve a state of Deep Reflection, he did indeed "cast off all anchors" and appeared to be completely out of touch with everything. On this attempt to experience subjectively and to remember the processes of entering into Deep Reflection, he developed the state within five minutes and emerged from it within two as closely as I could determine. His comment was, "I say, I'm deucedly sorry. I suddenly found myself all prepared to work with nothing to do and I realized I had better come out of it." That was all the information he could offer. For the next attempt, a signal to be given by me was agreed upon as a signal for him to "come out of it." A secondary attempt was made as easily as the first. Huxley sat quietly for some minutes and the agreed upon signal was given. Huxley's account was, "I found myself just waiting for something. I did not know what. It was just a 'something' that I seemed to feel would come in what seemed to be a timeless spaceless void. I say, that's the first time I noted that feeling. Always I've had some thinking to do. But this time I seemed to have no work in hand. I was just completely disinterested, indifferent, just waiting for something and then I felt a need to come out of it. I say, did you give me the signal?"

Inquiry disclosed that he had no apparent memory of the stimulus being given. He had had only the "feeling" that it was time to "come out of it."

Several more repetitions yielded similar results. A sense of a timeless spaceless void, a placid comfortable awaiting for an undefined "something" and a comfortable need to return to ordinary conscious awareness constituted the understandings achieved. Huxley summarized his findings briefly as "a total absence of everything on the way there and on the way back and an expected meaningless something for which one awaits in a state of Nirvana since there is nothing more to do." He asserted his intention to make a later intensive study of this practice he found so useful in his writing.

Further experiments were done after Huxley had explained that he could enter the state of deep reflection with the simple undefined understanding that he would respond to any "significant stimulus." Without informing him of my intentions, I asked him to "arouse" (this term is my own) when three taps of a pencil on a chair were given in close succession. He entered the state of reflection readily and, after a brief wait, I tapped the table with a pencil in varying fashions at distinct but irregular intervals. Thus, I tapped once, paused, then twice in rapid succession, paused, tapped once, paused, tapped four times in rapid succession, paused, then five times in rapid succession. Numerous variations were tried but with an avoidance

of the agreed upon signal. A chair was knocked over with a crash while four taps were given. Not until the specified three taps were given did he make any response. His arousal occurred slowly with almost an immediate response to the signal. Huxley was questioned about his subjective experiences. He explained simply that they had been the same as previously with one exception, namely that several times he had a vague sensation that "something was coming," but he knew not what. He had no awareness of what had been done.

Further experimentation was done in which he was asked to enter Deep Reflection and to sense color, a prearranged signal for arousing being that of a handshake of his right hand. He complied readily and when I judged that he was fully absorbed in his state of reflection, I shook his left hand vigorously, then followed this with a hard pinching of the back of both hands that left deep fingernail markings. Huxley made no response to this physical stimulation, although his eyes were watched for possible eyeball movements under the lids and his respiratory and pulse rates were checked for any changes. However, after about a minute he slowly drew his arms back along the arms of the chair where he had placed them before beginning his reflection state. They moved slowly about an inch and then all movement ceased.

He was aroused easily and comfortably at the designated signal.

His subjective report was simply that he had "lost" himself in a "sea of color," of "sensing," "feeling," "being" color, of being "quite utterly involved in it with no identity of your own, you know." Then suddenly he had experienced a process of losing that color in a "meaningless void," only to open his eyes and to realize that he had "come out of it."

He remembered the agreed upon stimulus but did not recall if it had been given. "I can only deduce it was given from the fact that I'm out of it," and indirect questioning disclosed no memories of the other physical stimuli administered. Neither was there an absent-minded looking at nor rubbing of the backs of his hands.

This same procedure in relation to color was repeated but to it was added, as he seemed to be reaching the state of deep reflection, a repeated insistent urging that, upon arousal, he discuss a certain book which was carefully placed in full view. The results were comparable to the preceding findings. He became "lost," . . . "quite utterly involved in it," . . . "one can sense it but not describe it," . . . "I say, it's an utterly amazing, fascinating state of finding yourself a pleasant part of an endless vista of color that is soft and gentle and yielding and all-absorbing. Utterly extraordinary, most extraordinary." He had no recollection of my verbal insistences nor of the other physical stimuli. He remembered the agreed upon signal but did not know if it had been given. He found himself only in a position of assuming that it had been given since he was again in a state of ordinary awareness. The presence of the book meant nothing to him. One added statement was that entering a state of Deep Reflection by absorbing himself in a sense of color was, in a fashion, comparable to but not identical with his psychedelic experiences.

As a final inquiry, Huxley was asked to enter the reflection state for the purpose of recalling the telephone call and the special-delivery letter incidents. His comment was that such a project should be "quite fruitful." Despite repeated efforts, he would "come out of it" explaining, "There I found myself without anything to do so I came out of it." His memories were limited to the accounts given to him by his wife and all details were associated with her and not with any inner feelings of experience on his part.

A final effort was made to discover whether or not Huxley could include another

person in his state of Deep Reflection. This idea interested him at once and it was suggested that he enter the reflection state to review some of his psychedelic experiences. This he did in a most intriguing fashion. As the reflection state developed, Huxley in an utterly detached dissociated fashion began making fragmentary remarks, chiefly in the form of self-addressed comments. Thus he would say, making fragmentary notes with a pencil and paper quickly supplied to him, "most extraordinary . . . I overlooked that . . . How? . . . Strange I should have forgotten that (making a notation) . . . fascinating how different it appears . . . I must look. . . ."

When he aroused, he had a vague recollection of having reviewed a previous psychedelic experience but what he had experienced then or on the immediate occasion he could not recall. Nor did he recall speaking aloud nor making notations. When shown these, he found that they were so poorly written that they could not be read. I read mine to him without eliciting any memory traces.

A repetition yielded similar results with one exception. This was an amazed expression of complete astonishment by Huxley suddenly declaring, "I say, Milton, this is quite utterly amazing, most extraordinary. I use Deep Reflection to summon my memories, to put into order all of my thinking, to explore the range, the extent of my mental existence, but I do it solely to let those realizations, the thinking, the understandings, the memories seep into the work I'm planning to do without my conscious awareness of them. Fascinating . . . never stopped to realize that my deep reflection always preceded a period of intensive work wherein I was completely absorbed. . . . I say, no wonder I have an amnesia."

Later when we were examining each other's notebook, Huxley manifested intense amazement and bewilderment at what I had recorded about the physical stimuli and for which he had no memory of any sort. He knew that he had gone into deep reflection repeatedly at my request, had been both pleased and amazed at his subjective feelings of being lost in an all-absorbing sea of color, had sensed a certain timelessness spacelessness and had experienced a comfortable feeling of something meaningful about to happen. He reread my notations repeatedly in an endeavor to develop some kind of a feeling of at least a vague memory of subjective awareness of the various physical stimuli I had given him. He also looked at the backs of his hands to see the pinch marks but they had vanished. His final comment was, ". . . extraordinary, most extraordinary, I say, utterly fascinating."

When we agreed that, at least for the while, further inquiry into Deep Reflection might be postponed until later, Huxley declared again that his sudden realization of how much he had used it and how little he knew about it made him resolve to investigate much further into his "Deep Reflection." The manner and means by which he achieved it, how it constituted a form of preparation for absorbing himself in his writing and in what way it caused him to lose unnecessary contact with reality were all problems of much interest to him.

Huxley then suggested that an investigation be made of hypnotic states of awareness by employing him as a subject. He asked permission to be allowed to interrupt his trance states at will for purposes of discussion. This was in full accord with my own wishes.

He asked that first a light trance be induced, perhaps repeatedly, to permit an exploration of his subjective experiences. Since he had briefly been a somnambulistic subject previously, he was carefully assured that this fact could serve to make him feel confident in arresting his trance states at any level he wished. He did not

recognize this as a simple direct hypnotic suggestion. In reading my notebook later he was much amused at how easily he had accepted an obvious suggestion without recognizing its character at the time.

He found several repetitions of the light trance interesting but "too easily conceptualized." It is, he explained, "A simple withdrawl of interest from the outside to the inside." That is, one gives less and less attention to externalities and directs more and more attention to inner subjective sensations. Externalities become increasingly fainter and more obscure, inner subjective feelings more satisfying until a state of balance exists. In this state of balance, he had the feeling that, with motivation, he could "reach out and seize upon reality," that there is a definite retention of a grasp upon external reality but with no motivation to deal with it. Neither did he feel a desire to deepen the trance. No particular change in this state of balance seemed necessary and he noted that a feeling of contentment and relaxation accompanied it. He wondered if others experienced the same subjective reactions.

Huxley requested that the light trance be induced by a great variety of techniques, some of them non-verbal. The results in each instance, Huxley felt strongly, were dependent entirely upon his mental set. He found that he could accept "drifting along" (my phrase) in a light trance, receptive of suggestions involving primarily responses at a subjective level only. He found that an effort to behave in direct relationship to the physical environment taxed his efforts and made him desire either to arouse from the trance or to go still deeper. He also, on his own initiative, set up his own problems to test his trance states. Thus, before entering the light trance he would privately resolve to discuss a certain topic, relevant or irrelevant, with me at the earliest possible time or even at a fairly remote time. In such instances, Huxley found such unexpressed desires deleterious to the maintenance of the trance. Similarly any effort to include an item of reality not pertinent to his sense of subjective satisfaction lessened the trance.

At all times there persisted a "dim but ready" awareness that one could alter the state of awareness at will. Huxley, like others with whom I have done similar studies, felt an intense desire to explore his sense of subjective comfort and satisfaction but immediately realized that this would lead to a deeper trance state.

When Huxley was asked to formulate understandings of the means he could employ by which he could avoid going into more than a light trance, he stated that he did this by setting a given length of time during which he would remain in a light trance. This had the effect of making him more strongly aware that at any moment he could "reach out and seize external reality" and that his sense of subjective comfort and ease decreased. Discussion of this and repeated experimentation disclosed that carefully worded suggestions serving to emphasize the availability of external reality and to enhance subjective comfort could serve to deepen the trance even though Huxley was fully cognizant of what was being said and why. Similar results have been obtained with other highly intelligent subjects.

In experimenting with medium deep trances, Huxley, like other subjects with whom I have worked, experienced much more difficulty in reacting to and maintaining a fairly constant trance level. He found that he had a subjective need to go deeper in the trance and an intellectual need to stay at the medium level. The result was that he found himself repeatedly "reaching out for awareness" of his environment and this would initiate a light trance. He would then direct his attention to subjective comfort and find himself developing a deep trance. Finally, after re-

peated experiments, he was given both post-hypnotic and direct hypnotic suggestion to remain in a medium deep trance. This he found he could do with very little concern then. He described the medium trance as primarily characterized by a most pleasing subjective sense of comfort and a vague dim faulty awareness that there was an external reality for which he felt a need for considerable motivation to be able to examine it. However, if he attempted to examine even a single item of reality for its intrinsic value, the trance would immediately become increasingly lighter. On the other hand, when he examined an item of external reality for subjective values, for example, the soft comfort of the chair cushions as contrasted to the intrinsic quiet of the room, the trance became deeper. But both light and deep trances were characterized by a need to sense external reality in some manner, not necessarily clearly but nevertheless to retain some recognizable awareness of it.

For both types of trance, experiments were carried out to discover what hypnotic phenomena could be elicited in both light and medium deep trances. This same experiment has been done with other good subjects and also with subjects who consistently developed only a light trance and with those who consistently did not seem to be able to go further than the medium trance. In all such studies, the findings were the same, the most important seeming to be the need of light and medium deep hypnotic subjects to retain at least some grasp upon external reality and to orient their trance state as a state apart from external reality but with the orientation to such reality, however tenuous in character, sensed as available for immediate utilization by the subject.

Another item which Huxley discovered by his own efforts unguided by me and of which I was fully aware through work with other subjects, was that the phenomena of deep hypnosis can be developed in both the light and the medium trance. Huxley, having observed deep hypnosis, wondered about the possibility of developing hallucinatory phenomena in the light trance. He attempted this by the measure of enjoying his subjective state of physical comfort and adding to it an additional subjective quality, namely, a pleasant gustatory sensation. He found it quite easy to hallucinate vividly various taste sensations while wondering vaguely what I would think if I knew what he were doing. He was not aware of his increased swallowing when he did this. From gustatory sensations he branched out to olfactory hallucinations both pleasant and unpleasant. He did not realize that he betrayed this by the flaring of his nostrils. His thinking at the time, so he subsequently explained, was that he had the "feeling" that hallucinations of a completely "inner type of process," that is, occurring within the body itself, would be easier than those in which the hallucination appeared to be external to the body. From olfactory hallucinations he progressed to kinesthetic, proprioceptive and finally tactile sensations. In the kinesthetic hallucinatory sensation experience he hallucinated taking a long walk but remaining constantly aware that I was present in some vaguely sensed room. Momentarily he would forget about me and his hallucinated walking would become most vivid. He recognized this as an indication of the momentary development of a deeper trance state which he felt obligated to remember to report to me during the discussion after his arousal. He was not aware of respiratory and pulse changes during the hallucinatory walk.

When he first tried for visual and auditory hallucinations, he found them much more difficult and the effort tended to lighten and to abolish his trance state. He finally reasoned that if he could hallucinate rhythmical movements of his body, he could then "attach" an auditory hallucination to this hallucinated body sensation.

The measure proved most successful and again he caught himself wondering if I could hear the music. His breathing rate changed and slight movements of his head were observed. From simple music he proceeded to an hallucination of opera singing and then finally a mumbling of words which eventually seemed to become my voice questioning him about Deep Reflection. I could not recognize what was occurring.

From this he proceeded to visual hallucinations. At attempt to open his eyes nearly aroused him from his trance state. Thereafter he kept his eyes closed for both light and medium deep trance activities. His first visual hallucination was a vivid flooding of his mind with an intense sense of pastel colors of changing hues and with a wavelike motion. He related this experience to his Deep Reflection experiences with me and also to his previous psychedelic experiences. He did not consider this experience sufficiently valid for his purposes of the moment because he felt that vivid memories were playing too large a part. Hence he deliberately decided to visualize a flower but the thought occurred to him that, even as a sense of movement played a part in auditory hallucinations, he might employ a similar measure to develop a visual hallucination. At the moment, so he recalled after arousing from the trance and while discussing his experience, he wondered if I had ever built up hallucinations in my subjects by combining various sensory fields of experience. I told him that that was a standard procedure for me.

He proceeded with this visual hallucination by "feeling" his head turn from side to side and up and down to follow a barely visible, questionably visible, rhythmically moving object. Very shortly the object became increasingly more visible until he saw a giant rose, possibly three feet in diameter. This he did not expect and thus he was certain at once that it was not a vivified memory but a satisfactory hallucination. With this realization came the realization that he might very well add to the hallucination by adding olfactory hallucinations of an intense "unroselike" sickeningly sweet odor. This effort was also most successful. After experimenting with various hallucinations, Huxley aroused from his trance and discussed extensively what he had accomplished. He was pleased to learn that his experimental findings without any coaching or suggestions from me were in good accord with planned experimental findings with other subjects.

This discussion raised the question of anesthesia, amnesia, dissociation, depersonalization, regression, time distortion, hypermnesia (an item difficult to test with Huxley because of his phenomenal memory) and an exploration of past repressed events.

Of these, Huxley found that anesthesia, amnesia, time distortion, and hypermnesia were possible in the light trance. The other phenomena were conducive to the development of a deep trance with any earnest effort to achieve them.

The anesthesia he developed in the light trance was most effective for selected parts of the body. When generalized anesthesia from the neck down was attempted, Huxley found himself "slipping" into a deep trance.

The amnesia, like the anesthesia, was effective when selective in character. Any effort to have a total amnesia resulted in a progression toward a deep trance.

Time distortion was easily possible and Huxley offered the statement that he was not certain but that he felt strongly that he had long employed time distortion in Deep Reflection, although his first formal introduction to the concept had been through me.

Hypermnesia, so difficult to test because of his extreme capacity to recall past events, was tested upon my suggestion by asking him in the light trance state to state promptly upon request on what page of various of his books certain paragraphs could be found. At the first request, Huxley aroused from the light trance and explained, "Really now, Milton, I can't do that. I can with effort recite most of that book, but the page number for a paragraph is not exactly cricket." Nevertheless, he went back into a light trance, the name of the volume was given, a few lines of a paragraph were read aloud to him whereupon he was to give the page number on which it appeared. He succeeded in definitely better than 65 percent in an amazingly prompt fashion. Upon awakening from the light trance, he was instructed to remain in the state of conscious awareness and to execute the same task. To his immense astonishment he found that, while the page number "flashed" into his mind in the light trance state, in the waking state he had to follow a methodical procedure of completing the paragraph mentally, beginning the next, then turning back mentally to the preceding paragraph and then "making a guess." When restricted to the same length of time he had employed in the light trance, he failed in each instance. When allowed to take whatever length of time he wished, he could reach an accuracy of about 40 percent, but the books had to be ones more recently read than those used for the light trance state.

Huxley then proceeded to duplicate in the medium trance all that he had done in the light trance. He accomplished similar tasks much more easily but constantly experienced a feeling of "slipping" into a deeper trance.

Huxley and I discussed this hypnotic behavior of his at very considerable length with Huxley making most of the notations since only he could record his own subjective experience in relation to the topics discussed. For this reason the discussion here is limited.

We then turned to the question of deep hypnosis. Huxley developed easily a profound somnambulistic trance in which he was completely disoriented spontaneously for time and place. He was able to open his eyes but described his field of vision as being a "well of light" which included me, the chair in which I sat, himself and his chair. He remarked at once upon the remarkable spontaneous restriction of his vision, and disclosed an awareness that, for some reason unknown to him, he was obligated to "explain things" to me. Careful questioning disclosed him to have an amnesia about what had been done previously, nor did he have any awareness of our joint venture. His feeling that he must explain things became a casual willingness as soon as he verbalized it. One of his first statements was, "Really, you know, I can't understand my situation or why you are here wherever that may be but I must explain things to you." He was assured that I understood the situation and that I was interested in receiving any explanation he wished to give and told that I might make requests of him. Most casually, indifferently he acceded, but it was obvious that he was enjoying a state of physical comfort in a contented passive manner.

He answered questions simply and briefly, giving literally and precisely no more and no less than the literal significance of the question implied. In other words, he showed the same precise literalness found in other subjects, perhaps more so because of his knowledge of semantics.

He was asked, "What is to my right?" His answer was simply, "I don't know." "Why?" "I haven't looked." "Will you do so?" "Yes." "Now!" "How far do you

want me to look?" This was not an unexpected inquiry since I have encountered it innumerable times. Huxley was simply manifesting a characteristic phenomenon of the deep somnambulistic trance in which visual awareness is restricted in some inexplicable manner to those items pertinent to the trance situation. For each chair, couch, footstool I wished him to see, specific instructions were required. As Huxley explained later, "I had to look around until gradually it (the specified object) slowly came into view, not all at once, but slowly as if it were materializing. I really believe that I felt completely at ease without a trace of wonderment as I watched things materialize. I accepted everything as a matter of course." Similar explanations have been received from hundreds of subjects. Yet experience has taught me the importance of my assumption of the role of a purely passive inquirer, one who asks a question solely to receive an answer regardless of its content. An intonation of interest in the meaning of the answer is likely to induce the subject to respond as if he had been given instructions concerning what answer to give. In therapeutic work I use intonations to influence more adequate personal responses by the patient.

With Huxley I tested this by enthusiastically asking, "What, tell me now, is that which is just about 15 feet in front of you?" The correct answer should have been, "A table." Instead, the answer received was "A table with a book and a vase on it." Both the book and the vase were on the table but on the far side of the table and hence more than 15 feet away. Later the same inquiry was made in a casual indifferent fashion, "Tell me now what is that just about 15 feet in front of you?" He replied, despite his previous answer, "A table." "Anything else?" "Yes." "What else?" "A book." (This was nearer to him than was the vase.) "Anything else?" "Yes." "Tell me now." "A vase. Anything else?" "Yes." "Tell me now." "A spot." "Anything else?" "No."

This literalness and this peculiar restriction of awareness to those items of reality constituting the precise hypnotic situation is highly definitive of a satisfactory somnambulistic hypnotic trance. Along with the visual restriction, there is also an auditory restriction of such character that sounds, even those originating between the operator and the subject seem to be totally outside the hypnotic situation. Since there was no assistant present, this auditory restriction could not be tested. However, by means of a black thread not visible to the eye, a book was toppled from the table behind him against his back. Slowly, as if he had experienced an itch, Huxley raised his hand and scratched his shoulder. There was no startle reaction. This, too, is characteristic of the response made to many unexpected physical stimuli. They are interpreted in terms of past body experience. Quite frequently as a part of developing a deep somnambulistic trance, subjects will concomitantly develop a selective general anesthesia for physical stimuli not constituting a part of the hypnotic situation, physical stimuli in particular that do not permit interpretation in terms of past experience. This could not be tested in the situation with Huxley since an assistant is necessary to make adequate tests without distorting the hypnotic situation. One illustrative measure I have used is to pass a threaded needle through the coat sleeve while positioning the arms and then having an assistant saw back and forth on the thread from a place of concealment. Often a spontaneous anesthesia would keep the subject unaware of the stimulus. Various simple measures are easily devised.

Huxley was then gently indirectly awakened from the trance by the simple suggestion that he adjust himself in his chair to resume the exact physical and mental

state he had had at the decision to discontinue until later any further experimental study of Deep Reflection.

Huxley's response was an immediate arousal and he promptly stated that he was all set to enter deep hypnosis. While this statement in itself indicated profound post-hypnotic amnesia, delaying tactics were employed in the guise of discussion of what might possibly be done. In this way it became possible to mention various items of his deep trance behavior. Such mention evoked no memories and Huxley's discussion of the points raised showed no sophistication resulting from his deep trance behavior. He was as uninformed about the details of his deep trance behavior as he had been before the deep trance had been induced.

There followed more deep trances by Huxley in which, avoiding all personal significances, he was asked to develop partial, selective, and total post-hypnotic amnesias (by partial is meant a part of the total experience, by selective amnesia is meant an amnesia for selected, perhaps interrelated items of experience), a recovery of the amnestic material and a loss of the recovered material. He developed also catalepsy tested by "arranging" him comfortably in a chair and then creating a situation constituting a direct command to rise from the chair ("take the book on that table there and place it on the desk over there and do it now"). By this means Huxley found himself, inexplicably to him, unable to arise from the chair and unable to understand why this was so. (The "comfortable arrangement" of his body had resulted in a positioning that would have to be corrected before he could arise from the chair and no implied suggestions for such correction were to be found in the instructions given. Hence he sat helplessly unable to stand, unable to recognize why. This same measure has been employed to demonstrate a saddle block anesthesia before medical groups. The subject in the deep trance is carefully positioned, a casual conversation is then conducted, the subject is then placed in rapport with another subject who is asked to exchange seats with the first subject. The second subject steps over only to stand helplessly while the first subject discovers that she is (1) unable to move, and (2) that shortly the loss of inability to stand results in a loss of orientation to the lower part of her body and a resulting total anesthesia without anesthesia having been mentioned even in the preliminary discussion of hypnosis. This unnoticed use of catalepsy not recognized by the subject is a most effective measure in deepening trance states.

Huxley was amazed at his loss of mobility and became even more so when he discovered a loss of orientation to the lower part of his body and he was most astonished when I demonstrated for him the presence of a profound anesthesia. He was much at loss to understand the entire sequence of events. He did not relate the comfortable positioning of his body to the unobtrusively induced catalepsy with its consequent anesthesia.

He was aroused from the trance state with persistent catalepsy, anesthesia and a total amnesia for all deep trance experiences. He spontaneously enlarged the instruction to include all trance experiences, possibly because he did not hear my instructions sufficiently clearly. Immediately he reoriented himself to the time at which we had been working with Deep Reflection. He was much at loss to explain his immobile state, and he expressed curious wonderment about what he had done in the deep reflection state, from which he assumed he had just emerged, and what had led to such inexplicable manifestations for the first time in all of his experience. He became greatly interested, kept murmuring such comments as "Most extraordi-

nary" while he explored the lower part of his body with his hands and eyes. He noted that he could tell the position of his feet only with his eyes, that there was a profound immobility from the waist down, and he discovered, while attempting futilely because of the catalepsy to move his leg with his hands that a state of anesthesia existed. This he tested variously, asking me to furnish him with various things in order to make his test. For example, he asked that ice be applied to his bare ankle by me since he could not bend sufficiently to do so. Finally, after much study he turned to me, remarking, "I say, you look cool and most comfortable while I am in a most extraordinary predicament. I deduce that in some subtle way you have distracted and disturbed my sense of body awareness. I say, is this state anything like hypnosis?"

Restoration of his memory delighted him, but he remained entirely at loss concerning the genesis of his catalepsy and his anesthesia. He realized, however, that some technique of communication had been employed to effect the results achieved but he did not succeed in the association of the positioning of his body with the final results.

Further experimentation in the deep trance investigated visual, auditory and other types of ideo sensory hallucinations. One of the measures employed was to pantomime hearing a door open and then to appear to see someone entering the room, to arise in courtesy and to indicate a chair, then to turn to Huxley to express the hope that he was comfortable. He replied that he was and he expressed surprise at his wife's unexpected return since he had expected her to be absent the entire day. (The chair I had indicated was one I knew his wife liked to occupy.) He conversed with her and apparently hallucinated replies. He was interrupted with the question of how he knew that it was his wife and not an hypnotic hallucination. He examined the question thoughtfully, then explained that I had not given him any suggestion to hallucinate his wife, that I had been as much surprised by her arrival as he had been, and that she was dressed as she had been just before her departure and not as I had seen her earlier. Hence, it was reasonable to assume that she was a reality. After a brief thoughtful pause, he returned to his "conversation" with her apparently continuing to hallucinate replies. Finally I attracted his attention and made a hand gesture suggestive of a disappearance toward the chair in which he "saw" his wife. To his complete astonishment he saw her slowly fade away. Then he turned to me and asked that I awaken him with a full memory of the experience. This I did and he discussed the experience at some length making many special notations in his notebook elaborating them with the answers to questions he put to me. He was amazed to discover that when I asked to awaken with a retention of the immobility and anesthesia, he *thought* he had awoken but that the trance state had, to him, unrecognizably persisted.

He then urged further work on hypnotic hallucinatory experiences and a great variety (positive and negative visual, auditory, olfactory, gustatory, tactile, kinesthetic, temperature, hunger, satiety, fatigue, weakness, profound excited expectation, etc.) were explored. He proved to be most competent in all regards and it was noted that his pulse rate would change as much as twenty points when he was asked to hallucinate the experience of mountain climbing in a profound state of weariness. He volunteered in his discussion of these varied experiences the information that while a negative hallucination could be achieved readily in a deep trance, it would be most difficult in a light or medium trance because negative hallucinations were

most destructive of reality values, even those of the hypnotic situation. That is, with induced negative hallucinations, he found that I was blurred in outline even though he could develop a deep trance with a negative hallucination inherent in that deep trance for all external reality except the realities of the hypnotic situation which would remain clear and well defined unless suggestions to the contrary were offered. Subsequent work with other subjects confirmed this finding by Huxley. I had not previously explored this matter of negative hallucinations in light and medium trances.

At this point, Huxley recalled his page number identification in the lighter trance states during the inquiry into hypermnesia and he asked that he be subjected to similar tests in deep hypnosis. Together we searched the library shelves, finally selecting several books that Huxley was certain he must have read many years previously but which he had not touched for twenty or more years. (One, apparently, he had never read, the other five he had.)

In a deep trance with his eyes closed, Huxley listened intently, as I opened the book at random and read a half dozen lines from a selected paragraph. For some, he identified the page number almost at once and then he would hallucinate the page, and "read" it from the point where I had stopped. Additionally, he identified the occasion on which he read the book. Two of the books he recalled consulting fifteen years previously. Another two he found it difficult to give the correct page number and then only approximating the page number. He could not hallucinate the printing and could only give little more than a summary of the thought content; but this, in essence, was correct. He could not identify when he had read them but he was certain it was more than twenty-five years previously.

Huxley, in the post-trance discussion was most amazed by his performance as a memory feat but commented upon the experience as primarily intellectual with the recovered memories lacking in any emotional significances of belonging to him as a person. This led to a general discussion of hypnosis and Deep Reflection with a general feeling of inadequacy on Huxley's part concerning proper conceptualization of his experiences for comparison of values. While Huxley was most delighted with his hypnotic experiences for their interest and the new understandings they offered him, he was also somewhat at a loss. He felt that, as a purely personal experience, he derived certain unidentifiable subjective values from Deep Reflection not actually obtainable from hypnosis which offered only a wealth of new points of view. Deep Reflection, he declared, gave him certain inner enduring feelings that seemed to play some significant part in his pattern of living. During this discussion he suddenly asked if hypnosis could be employed to permit him to explore his psychedelic experiences. His request was met but upon arousal from the trance he expressed the feeling that the hypnotic experience was quite different than was a comparable "feeling through" by means of Deep Reflection. He explained that the hypnotic exploration did not give him an inner feeling, that is, a continuing subjective feeling, of just being in the midst of his psychedelic experience, that there was an ordered intellectual content paralleling the "feeling content" while Deep Reflection established a profound emotional background of a stable character upon which he could "consciously lay effortlessly an intellectual display of ideas" to which the reader would make full response. This discussion Huxley brought to a close by the thoughtful comment that his brief intensive experience with hypnosis had not yet begun to digest and that he could not expect to offer an intelligent comment without much more thought.

He asked urgently that further deep hypnosis be done with him in which more complex phenomena be induced to permit him to explore himself more adequately as a person. After a rapid mental review of what had been done and what might yet be done, I decided upon the desirability of a deep trance state with the possibility of a two-state dissociative regression, that is, of the procedure of regressing him by dissociating him from a selected recent area of his life experience so that he could view it as an onlooker from the orientation of another relatively recent area of life experience. The best way to do this I felt would be by a confusion technique (Erickson, M. H., *The confusion technique in hypnosis*, This JOURNAL* 1964, 6, 269-271). This decision to employ a confusion technique was influenced in large part by the author's awareness of Huxley's unlimited intellectual capacity and curiosity which would aid greatly by leading Huxley to add to the confusion technique verbalizations other possible elaborate meanings and significances and associations, thereby actually supplementing in effect my own efforts. Unfortunately, there was no tape recorder present to preserve the details of the actual suggestions which were to the effect that Huxley go ever deeper and deeper into a trance until "the depth was a part and apart" from him, that before him would appear in "utter clarity, in living reality, in impossible actuality, that which once was, but which now in the depths of the trance, will, in bewildering confrontation challenge all of your memories and understandings." This was a purposely vague yet permissively comprehensive suggestion and I simply relied upon Huxley's intelligence to elaborate it with an extensive meaningfulness for himself which I could not even attempt to guess. There were, of course, other suggestions but they centered in effect upon the suggestion enclosed in the quotation above. What I had in mind was not a defined situation but a setting of the stage so that Huxley himself would be led to define the task. I did not even attempt to speculate upon what my suggestions might mean to Huxley.

It became obvious that Huxley was making an intensive hypnotic response during the prolonged repetitious suggestions I was offering when suddenly he raised his hand and said rather loudly and most urgently, "I say, Milton, do you mind hushing up there. This is most extraordinarily interesting down here and your constant talking is frightfully distracting and annoying."

For more than two hours, Huxley sat with his eyes open, gazing intently before him. The play of expression on his face was most rapid and bewildering. His heart rate and respiratory rate were observed to change suddenly and inexplicably and repeatedly at irregular intervals. Each time that the author attempted to speak to him, Huxley would raise his hand, perhaps lift his head, and speak as if the author were at some height above him, and frequently he would annoyedly request silence.

After well over two hours, he suddenly looked up toward the ceiling and remarked with puzzled emphasis, "I say, Milton, this is an extraordinary contretemps. We don't know you. You do not belong here. You are sitting on the edge of a ravine watching both of us and neither of us knows which one is talking to you; and we are in the vestibule looking at each other with most extraordinary interest. We know that you are someone who can determine our identity and most extraordinarily we are both sure we know it and that the other is not really so, but merely a mental image of the past or of the future. But you must resolve it despite time and distances and even though we do not know you. I say, this is an extraordinarily fascinating predicament, and am I he or is he me? Come, Milton, whoever you are."

*Amer. J. Clin. Hypn.

There were other similar remarks of comparable meaning which could not be recorded, and Huxley's tone of voice suddenly became most urgent. The whole situation was most confusing to me, but temporal and other types of dissociation seemed to be definitely involved in the situation.

Wonderingly, but with outward calm, I undertook to arouse Huxley from the trance state by accepting the partial clues given and by saying in essence, "Wherever you are, whatever you are doing, listen closely to what is being said and slowly, gradually, comfortably begin to act upon it. Feel rested and comfortable, feel a need to establish an increasing contact with my voice, with me, with the situation I represent, a need of returning to matters in hand with me not so long ago, in the not so long ago belonging to me, *and leave behind but AVAILABLE UPON REQUEST practically everything of importance*, KNOWING BUT NOT KNOWING that it is AVAILABLE UPON REQUEST. And now, let us see, that's right, you are sitting there, wide awake, rested, comfortable, and *ready for discussion of what little there is.*"

Huxley aroused, rubbed his eyes, and remarked, "I have a most extraordinary feeling that I have been in a profound trance, but it has been a most sterile experience. I recall you suggesting that I go deeper in a trance, and I felt myself to be most compliant, and though I feel much time has elapsed, I truly believe a state of Deep Reflection would have been more fruitful."

Since he did not specifically ask the time, a desultory conversation was conducted in which Huxley compared the definite but vague appreciation of external realities of the light trance with the more definitely decreased awareness of externalities in the medium trance which is accompanied by a peculiar sense of minor comfort that those external realities can become secure actualities at any given moment.

He was then asked about realities in the deep trance from which he had just recently aroused. He replied thoughtfully that he could recall vaguely feeling that he was developing a deep trance but that no memories came to mind associated with it. After some discussion of hypnotic amnesia and the possibility that he might be manifesting such a phenomenon, he laughed with amusement and stated that such a topic would be most intriguing to discuss. After still further desultory conversation, he was asked *a propos* of nothing, "In what vestibule would you place that chair?" (indicating a nearby armchair.) His reply was remarkable. "Really, Milton, that is a most extraordinary question. Frightfully so! It is quite without meaning, but that word 'vestibule' has a strange feeling of immense anxious warmth about it. Most extraordinarily fascinating!" He lapsed into a puzzled thought for some minutes and finally stated that if there were any significance, it was undoubtedly some fleeting esoteric association. After further casual conversation, I remarked, "As for the edge where I was sitting, I wonder how deep the ravine was." To this Huxley replied, "Really Milton, you can be most frightfully cryptic. Those words 'vestibule,' 'edge' 'ravine' have an extraordinary effect upon me. It is most indescribable. Let me see if I can associate some meaning with them." For nearly 15 minutes Huxley struggled vainly to secure some meaningful associations with those words, now and then stating that my apparently purposive but unrevealing use of them constituted a full assurance that there was a meaningful significance which should be apparent to him. Finally he disclosed with elation, "I have it now. Most extraordinary how it escaped me. I'm fully aware that you had me in a trance and unquestionably those words had something to do with the deep trance which seemed to be so sterile to me. I wonder if I can recover my associations."

After about 20 minutes of silent, obviously intense thought on his part, Huxley

remarked, "If those words do have a significance, I can truly say that I have a most profound hypnotic amnesia. I have attempted Deep Reflection, but I have found my thoughts centering around my mescaline experiences. It was indeed difficult to tear myself away from those thoughts. I had a feeling that I was employing them to preserve my amnesia. Shall we go on for another half hour on other matters to see if there is any spontaneous recall in association with 'vestibule,' 'edge' and 'ravine?'"

Various topics were discussed until finally Huxley said, "It is a most extraordinary feeling of meaningful warmth those words have for me, but I am utterly, I might say frightfully, helpless. I suppose I will have to depend upon you for something, whatever that may be. It's extraordinary, most extraordinary."

This comment I deliberately bypassed but during the ensuing conversation Huxley was observed to have a most thoughtful puzzled expression on his face, though he made no effort to press me for assistance. After some time, I commented with quiet emphasis, "Well, perhaps now matters will *become available*." From his lounging comfortable position in his chair, Huxley straightened up in a startled amazed fashion and then poured forth a torrent of words too rapid to record except for occasional notes.

In essence, his account was that the word "available" had the effect of drawing back an amnestic curtain, laying bare a most astonishing subjective experience that had miraculously been "wiped out" by the words "leave behind" and had been recovered *in toto* by virtue of the cue words of "become available."

He explained that he now realized that he had developed a "deep trance," a psychological state far different from his state of Deep Reflection, that in Deep Reflection there was an attenuated but unconcerned and unimportant awareness of external reality, a feeling of being in a known sensed state of subjective awareness, of a feeling of control and a desire to utilize capabilities and in which past memories, learnings, and experiences flowed freely and easily. Along with this flow there would be a continuing sense in the self that these memories, learnings, experiences, and understandings, however vivid, were no more than just such an orderly meaningful alignment of psychological experiences out of which to form a foundation for a profound pleasing subjective emotional state from which would flow comprehensive understandings to be utilized immediately and with little conscious effort.

The deep trance state, he asserted, he now knew to be another and entirely different category of experience. External reality could enter but it acquired a new kind of subjective reality, a special reality of a new and different significance entirely. For example, while I had been included in part in his deep trance state, it was not as a specific person with a specific identity. Instead, I was known only as someone whom he (Huxley) knew in some vague and unimportant and completely unidentified relationship.

Aside from my "reality," there existed the type of reality that one encounters in vivid dreams, a reality that one does not question. Instead, one accepts such reality completely without intellectual questioning and there are no conflicting contrasts nor judgmental comparisons nor contradictions so that whatever is subjectively experienced is unquestioningly accepted as both subjectively and objectively genuine and in keeping with all else.

In his deep trance, Huxley found himself in a deep wide ravine, high up on the steep side of which, on the very edge, I sat, identifiable only by name and as annoyingly verbose.

Before him, in a wide expanse of soft dry sand was a nude infant lying on its

stomach. Acceptingly, unquestioning of its actuality, Huxley gazed at the infant, vastly curious about its behavior, vastly intent on trying to understand its flailing movements with its hands and the creeping movements of its legs. To his amazement, he felt himself experiencing a vague curious sense of wonderment as if he himself were the infant and looking at the soft sand and trying to understand what it was.

As he watched, he became annoyed with me since I was apparently trying to talk to him, and he experienced a wave of impatience and requested that I be silent. He turned back and noted that the infant was growing before his eyes, was creeping, sitting, standing, toddling, walking, playing, talking. In utter fascination he watched this growing child, sensed its subjective experiences of learning, of wanting, of feeling. He followed it in distorted time through a multitude of experiences as it passed from infancy to childhood to school days to early youth to teenage. He watched the child's physical development, sensed its physical and subjective mental experiences, sympathized with it, empathized with it, rejoiced with it, thought and wondered and learned with it. He felt as one with it, as if it were he himself, and he continued to watch it until finally he realized that he had watched that infant grow to the maturity of 23 years. He stepped closer to see what the young man was looking at, and suddenly realized that the young man was Aldous Huxley himself, and that this Aldous Huxley was looking at another Aldous Huxley, obviously in his early fifties, just across the vestibule in which they both were standing; and that he, aged 52 was looking at himself, Aldous, aged 23. Then Aldous, aged 23 and Aldous aged 52, apparently realized simultaneously that they were looking at each other and the curious questions at once arose in the mind of each of them. For one the question was, "Is that my idea of what I'll be like when I am 52?" and, "Is that really the way I appeared when I was 23?" Each was aware of the question in the other's mind. Each found the question of "Extraordinarily fascinating interest" and each tried to determine which was the "actual reality" and which was the "mere subjective experience outwardly projected in hallucinatory form."

To each the past 23 years was an open book, all memories and events were clear, and they recognized that they shared those memories in common, and to each only wondering speculation offered a possible explanation of any of the years between 23 and 52.

They looked across the vestibule (this "vestibule" was not defined) and up at the edge of the ravine where I was sitting. Both knew that that person sitting there had some undefined significance, was named Milton, and could be spoken to by both. The thought came to both, could he hear both of them, but the test failed because they found that they spoke simultaneously, nor could they speak separately.

Slowly, thoughtfully, they studied each other. One had to be real. One had to be a memory image or a projection of a self-image. Should not Aldous, aged 52, have all the memories of the years from 23 to 52? But if he did, how could he then see Aldous, aged 23, without the shadings and colorations of the years that had passed since that youthful age? If he were to view Aldous, aged 23, clearly, he would have to blot out all subsequent memories in order to see that youthful Aldous clearly and as he then was. But if he were actually Aldous, aged 23, why could he not speculatively fabricate memories for the years between 23 and 52 instead of merely seeing Aldous as 52 and nothing more? What manner of psychological blocking could exist to effect this peculiar state of affairs? Each found himself fully cogni-

zant of the thinking and the reasoning of the "other." Each doubted "the reality of the other" and each found reasonable explanations for such contrasting subjective experiences. The questions arose repeatedly, by what measure could the truth be established and of how did that unidentifiable person possessing only a name sitting on the edge of a ravine on the other side of the vestibule fit into the total situation? Could that vague person have an answer? Why not call to him and see?

With much pleasure and interest, Huxley detailed his total subjective experience, speculating upon the years of time distortion experienced and the memory blockages creating the insoluble problem of actual identity.

Finally, experimentally, the author remarked casually, "Of course, all that could be *left behind to become AVAILABLE at some later time.*"

Immediately there occurred a re-establishment of the original posthypnotic amnesia. Efforts were made to disrupt this re-induced hypnotic amnesia by veiled remarks, frank open statements, by a narration of what had occurred. Huxley found my narrative statements about an infant on the sand, a deep ravine, a vestibule "curiously interesting," simply cryptic remarks for which Huxley judged I had a purpose. But they were not evocative of anything more. Each statement I made was, in itself, actually uninformative and intended only to arouse associations. Yet no results were forthcoming until again the word "AVAILABLE" resulted in the same effect as previously. The whole account was related by Huxley a second time but without his realization that he was repeating his account. Appropriate suggestions when he had finished his second narration resulted in a full recollection of his first account. His reaction, after his immediate astonishment, was to compare the two accounts item by item. Their identity amazed him, and he noted only minor changes in the order of narration and the choice of words.

Again, as before, a posthypnotic amnesia was induced, and a third recollection was then elicited, followed by an induced realization by Huxley that this was his third recollection.

Extensive detailed notations were made of the whole sequence of events, and comparisons were made of the individual notations, with interspersed comments regarding significances. The many items were systematically discussed for their meanings and brief trances were induced to vivify various items. However, only a relatively few notations were made by me of the content of Huxley's experience since he would properly be the one to develop them fully. My notations concerned primarily the sequence of events and a fairly good summary of the total development.

This discussion was continued until preparations for scheduled activities for that evening intervened, but not before an agreement on a subsequent preparation of the material for publication. Huxley planned to use both Deep Reflection and additional self-induced trances to aid in writing the article but the unfortunate holocaust precluded this.

CONCLUDING REMARKS

IT IS UNFORTUNATE that the above account is only a fragment of an extensive inquiry into a nature of various states of consciousness. Huxley's state of Deep Reflection did not appear to be hypnotic in character. Instead, it seemed to be a state of utterly intense concentration with much dissociation from external realities

but with a full capacity to respond with varying degrees of readiness to externalities. It was entirely a personal experience serving as apparently as an unrecognized foundation for conscious work activity enabling him to utilize freely all that had passed through his mind in Deep Reflection.

His hypnotic behavior was in full accord with hypnotic behavior elicited from other subjects. He was capable of all the phenomena of the deep trance and he could respond readily to posthypnotic suggestions and to exceedingly minimal cues. He was emphatic in declaring that the hypnotic state was quite different from the Deep Reflection state.

While some comparison may be made with dream activity, and certainly the ready inclusion of the "vestibule" and the "ravine" in the same subjective situation is suggestive of dream-like activity, such peculiar inclusions are somewhat frequently found as a spontaneous development of profound hypnotic ideosensory activity in highly intellectual subjects. His somnambulistic behavior, his open eyes, his responsiveness to me, his extensive posthypnotic behavior all indicate that hypnosis was unquestionably definitive of the total situation in that specific situation.

Huxley's remarkable development of a dissociated state, even bearing in mind his original request for a permissive technique, to view hypnotically his own growth and development in distorted time relationships, while indicative of Huxley's all-encompassing intellectual curiosity, is suggestive of most interesting and informative research possibilities. Questioning post-experimentally disclosed that Huxley had no conscious thoughts or plans for review of his life experiences nor did he at the time of the trance induction make any such interpretation of the suggestions given him. This was verified by a trance induction and making this special inquiry. His explanation was that when he felt himself "deep in the trance" he then began to search for something to do and "suddenly there I found myself—most extraordinary."

While this experience with Huxley was most notable, it was not my first encounter with such developments in the regression of highly intelligent subjects. One such experimental subject asked that he be hypnotized and informed when in the trance that he was to develop a profoundly interesting type of regression. This was primarily to be done for his own interest while he was waiting for me to complete some work. His request was met and he was left to his own devices while sitting in a comfortable chair on the other side of the laboratory. About two hours later he requested that I awaken him. He gave an account of suddenly finding himself on an unfamiliar hillside and, in looking around he saw a small boy whom he immediately "knew" was six years old. Curious about this conviction about a strange little boy, he walked over to the child only to discover that that child was himself. He immediately recognized the hillside and set about trying to discover how he could be himself at 26 years of age watching himself at the age of 6 years. He soon learned that he could not only see, hear, and feel his child-self, but that he knew the innermost thoughts and feelings. At the moment of realizing this, he felt the child's feeling of hunger and his wish for "brown cookies." This brought a flood of memories to his 26-year-old self, but he noticed that the boy's thoughts were still centering on cookies and that the boy remained totally unaware of him. He was an invisible man, in some way regressed in time so that he could see and sense completely his childhood self. My subject reported that he "lived" with that boy for years, watched his successes and his failures, knew all of

his innermost life, wondered about the next day's events with the child and, like the child, he found to his amazement that even though he was 26 years old, a total amnesia existed for all events subsequent to the child's immediate age at the moment, that he could not foresee the future any more than could the child. He went to school with the child, vacationed with him, always watching the continuing physical growth and development. As each new day arrived, he found that he had a wealth of associations about the actual happenings of the past up to the immediate moment of life for the child-self.

He went through grade school, high school, and then through a long process of deciding whether or not to go to college and what course of studies he should follow. He suffered the same agonies of indecision that his then-self did. He felt his other self's elation and relief when the decision was finally reached and his own feeling of elation and relief was identical with that of his other self.

My subject explained that the experience was literally a moment by moment reliving of his life with only the same awareness he had then and that the highly limited restricted awareness of himself at 26 was that of being an invisible man watching his own growth and development from childhood on, with no more knowledge of the child's future than the child possessed.

He had enjoyed each completed event with a vast and vivid panorama of the past memories as each event reached completion. At the point of entrance to college the experienced terminated. He then realized that he was in a deep trance and that he wanted to awaken and to take with him into conscious awareness the memory of what he had been subjectively experiencing.

This same type of experience has been encountered with other experimental subjects, both male and female, but each account varies in the manner in which the experience is achieved. For example, a girl who had identical twin sisters three years younger than herself, found herself to be "a pair of identical twins growing up together but always knowing everything about the other." In her account there was nothing about her actual twin sisters, all such memories and associations were excluded.

Another subject, highly inclined mechanically, constructed a robot which he endowed with life only to discover that it was his own life with which he endowed it. He then watched that robot throughout many years of experiential events and learnings, always himself achieving them also because he had an amnesia for his past.

Repeated efforts to set up as an orderly experiment have to date failed. Usually the subject objects or refuses for some not too comprehensible a reason. In all my experiences with this kind of development in hypnotic trances, this type of "reliving" of one's life has always been a spontaneous occurrence and with highly intelligent well-adjusted experimental subjects.

Huxley's experience was the one most adequately recorded and it is most unfortunate that the greater number of details, having been left with him, were destroyed before he had the opportunity to write them up in full. Huxley's remarkable memory, his capacity to use Deep Reflection and his ability to develop a deep hypnotic state to achieve specific purposes and to arouse himself at will with full conscious awareness of what he had accomplished (Huxley required very little instruction the next day to become skilled in autohypnosis) augured exceedingly well for a most informative study. Unfortunately the destruction of both notebooks pre-

cluded him from any effort to reconstruct them from memory because my notebook contained so many notations of items of procedure and observation for which he had no memories and which were vital to any satisfactory elaboration. However, it is hoped that the report given here may serve, despite its deficiencies, as an initial pilot study for the development of a more adequate and comprehensive study of various states of consciousness.

SECTION III

Techniques of Therapy

Part I.

A Study of an Experimental Neurosis Hypnotically Induced in a Case of Ejaculatio Praecox*

THE EXPERIMENTAL INVESTIGATION of the clinical problems of personality disorders presents an interesting but difficult task. Most studies on such problems have been done by psychoanalysts acting chiefly as therapists. Purely experimental work has been neglected. Students in this clinical field, foremost among whom are the psychoanalysts themselves, are becoming increasingly aware of the need for a systematic technique which will lend itself to laboratory proof as contrasted with the empirical proof of subjective and clinical experience. As an approach to the experimental study of personality disturbances, a case of ejaculatio praecox was selected and subjected to a laboratory procedure intended to yield some information regarding the psychological mechanism termed abreaction.

The technique of experimentation was suggested by the well-established clinical fact, both in medicine and in psychoanalytic therapy, that recovery from one illness (or conflict) frequently results in the establishment of a new physiological equilibrium (or "redistribution of libido") thereby permitting the favorable resolution of a second concurrent and perhaps totally unrelated illness (or conflict). Of similar influence was the well-known fact that an intercurrent disease may exercise a favorable effect upon the original illness, for example, malaria in paresis. Consideration of these ideas suggested their adaptation to the case in hand at a psychic rather than the usual somatic level. It was determined to give the patient a second illness, which was to be a neurosis so formulated that it might symbolize or parallel the original difficulty, and might be expected to arouse similar or possibly identical affects. The assumption was made that such similarity or identity of affects would establish some dynamic relationship between the two neuroses, possibly through identification, or perhaps through an "adsorption" of the one conflict upon the other; and that when the patient, by virtue of the experimental situation, was forced to relive, abreact and resolve the conflict of the induced neurosis, there might occur a transference or generalization of the abreactive process to the original difficulty. Or perhaps the abreaction and resolution of the induced conflict might establish a new attitude or organization of the personality. At all events, the immediate experimental purpose was to establish a dynamic interrelationship of the two neuroses and to induce a readjustment of the personality.

**Brit. J. Med. Psychol.*, 1935, 15, 34-50.

The subject of this experiment was a single white male, twenty-five years old, who possessed a degree of doctor of philosophy in psychology. In addition, he possessed a fair knowledge of clinical psychology, and had been used extensively in experimental hypnotic work by the author for a period of a year before he disclosed his complaint. Because his difficulty had become progressively worse, he decided to seek psychiatric assistance, complained to the author of *ejaculatio praecox* and requested aid in overcoming this symptom. His story was as follows: Three years previously, he had decided to engage in sexual intercourse, and had made many attempts but always with a strong sense of guilt which he rationalized as a feeling that he was desecrating womanhood. From the first, he had suffered from *ejaculatio praecox*. On a few occasions, he had succeeded in securing a second erection permitting penetration but this was always followed by a precipitate orgasm and flaccidity. As these failures had been repeated, he had become increasingly worried and his problem had become progressively more acute. Originally, the overt act of beginning intercourse had resulted in an ejaculation, but at the time he sought aid, kissing or embracing and sometimes merely casual contact with an attractive girl would cause an erection and precipitate an orgasm with a complete loss of potency. Even when he did succeed in securing a second erection, he had not been able to utilize it either because of another precocious ejaculation or because of a precipitate orgasm upon penetration. He had resorted unsuccessfully to such measures as "prophylactic" masturbation to reduce his sexual tension and to the selection of girls without erotic appeal for him. His emotional reaction to these experiences was one of acute shame, bitterness, self-disgust and inferiority.

At the conclusion of his story, the young man was informed that the author would do no more than to take his case under advisement, that no therapy would be attempted until after a period of consideration, and he was urged to seek assistance from another psychiatrist. Then, changing the subject matter of discussion, the patient's cooperation was requested for a special hypnotic experiment *which he knew had already been under consideration for sometime* and which was to be developed in the course of the next few months. Although not fully content about the postponement of therapy, he continued his cooperation in regard to present and projected hypnotic work. Later, during the elaboration of the plans for the special hypnotic work, the idea of this experiment was conceived and developed for investigation. No intimation of this fact was given to the patient. He was allowed to continue in his belief that therapy was indefinitely postponed, and that the author was wholly absorbed in the previously projected hypnotic work, concerning which the patient had not been given any information. The rationale for this deception was the assumption that any therapeutic results of the hypnotic procedures utilized could then be attributed to the therapy itself rather than to the patient's hopes and expectations. A second gain, an important consideration in hypnotic therapy, was the possibility of hypnotizing the patient deeply for the experiment without making his success as a subject contingent in any way upon his neurosis.

During the course of the experimental work in which the patient had cooperated, he had been trained to accept "artificial complexes." These complexes were fabricated stories of an emotional nature told to the subject while in a profound hypnotic trance as accounts of actual past personal experiences which should constitute definite memories for him.*

Utilizing this background of the patient's, a special complex was designed for him which, when properly implanted in his mind, would theoretically tend to produce a second artificial neurosis of the type discussed above. The fabricated story, which follows shortly in its exact wording at the time of administration together with all hypnotic instructions, is fiction based upon an actual wish of the patient to secure a certain academic fellowship.

To orient the reader, it may be advisable to indicate the symbolism contained in the complex story. The heterosexual situation and its implications are apparent at once. Less clear are the symbolic equating of cigarette with penis and ashtray with vagina. Consideration of the heterosexual drives involved and the emotional forces at play in that particular setting—the man's attraction to the girl, his desire to give her something and thereby to gain satisfaction for himself, the girl's display of herself by means of her art work, and the parallelism of the catastrophe of this contact with those of past heterosexual contacts—establishes a fair plausibility of such identifications.

As soon as the patient had been placed in a profound somnambulistic hypnotic trance of the type characterized by apparently complete dissociation from all environmental stimuli and total amnesia post-hypnotically for all trance events and suggestions, he was given the following instructions:

Now, as you continue to sleep, I'm going to recall to your mind an event which occurred not long ago. As I recount this event to you, you will recall fully and completely everything that happened. You have had good reason to forget this occurrence, but as I recall it, you will remember each and every detail fully. Now bear this in mind, that while I repeat what I know of this event, you will recall fully and completely everything just as it happened, and more than that, you will re-experience the various conflicting emotions which you had at the time and you will feel exactly as you did while this occurrence was taking place.

Now the particular event of which I am going to tell you is this: Some time ago you met a man prominent in academic circles who manifested an interest in you and who was in a position to aid you in securing a certain research fellowship in which you were much interested. He made an appointment with you to see him at his home and, on that day, you called at the designated hour. When you knocked at the door, you were met not by this gentleman but by his wife who greeted you cordially and was very friendly, making you feel that her husband had given a good account of you to her. She explained apologetically that her husband had been called away for a few moments but that he would return shortly and had asked that you be made comfortable in the library. You accompanied her to this room where she introduced you to a charming girl who was obviously rather shy and reserved and who, she explained, was their only daughter. The mother then requested your permission to go about her work, explaining that the daughter would be happy to entertain you while you waited. You assured the mother that you would be very comfortable and, even now, you can recall the glow of pleasure you experienced at the thought of having the daughter as a hostess. As the mother left the room, you set about conversing with the girl, and despite her shyness and bashfulness, you soon found that she was as attractive conversationally as she was pleasing to the eye. You soon learned that she was much interested in painting, had attended art school, and was really profoundly interested in art. She timidly showed you some vases she had painted. Finally, she showed you a delicate little glass dish which she had painted in a very artistic manner, explaining that she had decorated it as an ashtray for her father, to be used more as an ornament than as an actual ashtray. You admired it very greatly.

*A detailed report of such an experimental procedure may be found in Huston, P. E., Shakow, D. and Erickson, M. H., "A study of hypnotically induced complexes by means of the Luria technique," *J. Gen. Psychol.*, 1934, xi, 15-97.

This mention of using the dish as an ashtray made you desirous of smoking. Because of her youth, you hesitated to give her a cigarette. Also, you did not know how her father might feel about such things and yet you wanted to observe the courtesies of smoking. As you debated this problem, you became increasingly impatient. The girl did not offer you a cigarette and thus solve your problem and you kept wishing that you might offer her a cigarette. Finally in desperation, you asked her permission to smoke which she granted very readily and you took a cigarette but did not offer her one. As you smoked, you looked about for an ashtray, and the girl, noticing your glance, urged you to use the ashtray she had designed for her father. Hesitantly, you did so and began talking on various topics. As you talked, you became aware of a rapidly mounting impatience for her father's return. Shortly, you became so impatient that you could not enjoy smoking any longer, and so great was your impatience and distress that, instead of carefully putting out your cigarette and then dropping it in the ashtray, you simply dropped the lighted cigarette into the ashtray and continued to converse with the girl. The girl apparently took no notice of the act but, after a few minutes, you suddenly heard a loud crack and you immediately realized that the cigarette you had dropped into the ashtray had continued burning and had heated the glass unevenly with the result that it had cracked in pieces. You felt very badly about this but the girl very kindly and generously insisted that it was a matter of small moment, that she had not yet given the ashtray to her father, that he would not know anything about it, and that he would not be disappointed. Nevertheless, you felt exceedingly guilty about your carelessness in breaking the ashtray and you wondered how her father would feel about it if he ever learned of it. Your concern was plainly evident, and when the mother came into the room you tried to explain, but she graciously reassured you and told you that it really did not matter. However, you felt most uncomfortable about it and it seemed to you that the girl felt badly too. Shortly after this, a telephone call was received from the father stating that he was called away for the rest of the day and asking your permission to see you on a later day. You left the house very gladly, feeling most wretched about the whole situation and realizing at the time that there was really nothing you could do about it.

Now after you are awakened, this whole situation will be on your mind. You will not consciously know what it is but, nevertheless, it will be on your mind, it will worry you and govern your actions and your speech although you will not be aware that it is doing so.

I have just told you of a recent experience of yours, and as I recounted it to you, you recalled it in detail, realizing the whole time that I gave you a fairly accurate account of the situation, that I gave the essential story. After you awaken, the whole situation will be on your mind but you will not be conscious of what it is, you will not even be aware of what it might be, but it will worry you and it will govern your speech and your actions. Do you understand? And you do feel badly about this thing.

The patient was promptly aroused from the trance state and within a few moments seemed completely awake. He appeared to have a total amnesia, not only for the trance events and suggestions, but also for the fact of having been hypnotized, the usual finding after deep hypnosis. Particularly, he showed bewilderment in orienting himself since darkness had fallen during the time that he had been asleep. He was engaged immediately in a casual conversation by two colleagues of the author who were present, while a secretary made full notes of all conversation together with a description of the patient's behavior and manner. It is not possible to present this material in its entirety because of its length and because of the necessity of preserving the patient's identity. The significant parts have been abstracted for presentation here.

Three general types of phenomena occurred during the post-hypnotic period. The first of these was the domination of every train of thought in the patient by his implanted, now subconscious, complex. Although he conversed fluently on a variety

of topics, each one was soon noted to be related to the complex, but in a manner apparent only to an observer who knew the whole situation. Care was taken not to suggest topics related to the complex; the patient himself made no reference to the content of the complex story itself, nor did any of his utterances suggest any conscious awareness of it. Neither was he given any suggestions which would serve to influence the trend of his behavior. Indeed, the colleague of the author who bore the burden of conducting the procedure was kept uninformed of the author's purposes as a means of insuring undirected responses from the patient. When the patient was asked about a certain friend of his, he told of that friend's small children breaking bric-a-brac. As the conversation continued, he told of the travels abroad of another friend who had visited art galleries and museums containing ancient painted vases; he spoke of the author's library and the advisability of insurance for personal property; and he laughingly told of an instance of careless smoking by a friend which had nearly resulted in a serious fire. Any topic of conversation introduced by the others present was soon developed by the patient in such fashion that a bearing upon the content of the complex became apparent to the observers. Furthermore, each conversational topic rapidly appeared to become unpleasant to the patient and he would change the subject repeatedly only to return compulsively to some remark which could be related easily to the complex.

Secondly, there occurred disturbances in the form of his stream of speech. Irrelevancies, stammering, blocking, loss of train of thought, repetitions, persistence of certain ideas, undue urgency and sudden strong emphases were all noted frequently. Thus, upon awakening, he began smoking and talking until he suddenly observed a painted ceramic ashtray at his elbow, whereupon he twisted uncomfortably in his seat, stammered, lost his train of thought, but gradually recovered his poise as the author's colleague assumed the burden of the conversation. Later, while talking about traveling abroad, he interjected remarks about the irreparable loss to art occasioned by the breaking of ancient vases and then continued the main topic of conversation without apparent realization of his digression. Again, in mentioning the author's library, he became unduly solicitous and urgent about insurance. In none of these instances did the patient seem to sense anything unusual in his behavior, despite their frequent occurrence. Observation at the time and consideration of the record later indicated that these behavior disturbances of the patient arose not in response to external stimuli but rather from his own intrapsychic state.

The third type of phenomenon noted during this period was phobialike obsessive behavior in regard to ashtrays. When casually handed a substantial, though ornamental, tray, he received it in a gingerly, fearful manner and appeared to be afraid to use it. Instead, after many hesitant, abortive and apparently compulsive attempts to flick ashes into it, he put them into the cuff of his trousers in an embarrassed manner. Now and then, he would succeed in dusting them into the tray, whereupon he would crush them repeatedly and uneasily with his fingertips as if to reassure himself about sparks. He held his cigarette butt until it burned his fingers, glanced at the floor and lifted his foot as if to dispose of it in that fashion, attempted to extinguish it in the cuff of his trousers but seemed too embarrassed to do so, made repeated abortive attempts to extinguish it in the ashtray in front of him by tapping the cigarette gently against the tray, and finally searched the room casually until he found a metal dish wherein he extinguished the butt methodically,

over-carefully, examining and re-examining it as if to be sure that it was not still burning. Whenever anyone dropped a used match into a tray, he seemed compelled to retrieve it immediately and to cool it between his finger and thumb before replacing it carefully on top of the ashes. While conversing, he examined and reexamined his ashtray in a detached manner, moved it unnecessarily away from the edge of the table, and finally put a soft mat under it. Despite all this difficulty in smoking, he accepted unconcernedly a cigarette whenever proffered or helped himself to his own supply, only to repeat his phobia-like behavior as he smoked.

Having noted this much of the patient's behavior—of which the above is only a brief summary—it was felt that he had "accepted" the complex, and had possibly developed in consequence an artificially induced neurosis. He was then questioned directly and urged to give an account of what had occurred since he entered the office. Despite insistent questioning, he was able to state only that he had spent the time smoking and conversing with the author's colleagues. No information was obtained suggesting that he had any conscious realization of the fact that he had been hypnotized or subjected to an unusual procedure. Accordingly he was re-hypnotized, and in this trance, he was instructed to recall completely upon awakening the entire experimental situation and to discuss freely his reactions, speech, behavior and conduct. It was assumed that, by means of this procedure, a "removal" of the complex could be effected, since the patient could thus relive it at a conscious level and thereby might gain an insight into his reactions. As he awakened, a casual conversation was initiated which he soon interrupted to ask if he had told the author of a recent unhappy experience of his. He proceeded to relate the story of the complex as the recollection of an actual event, doing so with appropriate emotional responses, even identifying the father as a man who actually could have played such a role. As he concluded, he started, looked bewildered, showed intense amazement, then smiled with relief and understanding, and declared, "Why, that was just a suggestion you gave me—in a hypnotic trance, too!"

After this realization, he began to discuss fully the various details of his conversation and conduct, progressing in chronological sequence, each item serving to awaken its successor as a fresh memory. Meanwhile, the secretary made full notes of his discussion and manner and of the questions and remarks addressed to him. He explained that, as the complex was narrated to him, he had displaced, elaborated and falsified true memories, weaving them into the fabricated account, thereby giving to the complex story the reality of an actual event. This transformation of the fabrication into a reality for him had been achieved readily upon his identification of the father with a gentleman whom he knew slightly and whom he had wished might play such a role. It was aided further by a strong resentment which he had developed immediately toward the author for having pried into his affairs and having learned about the unhappy incident. Upon awakening, he had felt at ease and comfortable but impelled to talk. As he talked, he had become aware of a constantly growing sense of discomfort, augmented by each topic of conversation and by his own remarks and by those of others despite the casual, appropriate nature of such comments. He had been astonished to discover his fear of an ashtray, and he had tried to conceal this terror and to overcome it by sheer force of will. At the same time, the tray had fascinated and distracted him repeatedly. Although he had tried, he had not been able to reach any understanding of his reactions. He had become even more distressed when he found that the same

feeling of terror had attached itself to other ashtrays and even to used matches. "I was just terribly afraid," he declared, "afraid of anything with heat in it."

When asked to describe his emotional reactions in their sequence, the patient stated that, when the complex had been given to him in the trance state, he had reacted to it "just as any normal person would to such a situation. It was a miserable thing to have happen." Upon awakening from the trance, he had not experienced any particular emotions but, as he had begun to talk, he had developed the same emotional state as he recalled having experienced in the hypnotic trance during the administration of the complex. As he continued to talk and had experienced blockings of speech, the periods of stammering, and had become aware of his intense fear of ashtrays, his emotional discomfort had increased markedly and he had become "wretched," "miserable," "depressed," "unhappy," "anxious," and "fearful." He described these changes naively by saying that the familiar and pleasant surroundings in which he had found himself had made his emotional distress seem "silly," "foolish," "inadequate," and "reasonless" and that his feeling had impelled him to "reach into past experiences" and seize upon "embarrassed affects" taken from "past embarrassing experiences" and to "add" these new and stronger emotions to those already existing. This had given him a sense of having improved the situation immeasurably in some undefinable way but it had made him "feel terrible, awful then." (It had been noted during the latter part of the time in which the patient had the complex that he had become labored and strained in behavior, speaking with effort, sighing deeply, and perspiring profusely—an observation which had led immediately to rehypnotizing him and "removing" the complex.)

The patient was questioned about the "past embarrassing affects" which he had "added" to the original affects. Without any apparent effort to evade the question, he launched into an academic discussion concerning the possibility of transference of learning as applied to emotional responses, which did not appear to yield any pertinent information. Neither did he seem to grasp the significance of the question.

Accordingly, he was asked how he felt about the whole situation as he recalled it. He replied, "Well, I'm glad to know that it was just a lot of suggestion and that it didn't really happen." He added that his hesitant, fearful manner of trying to use the ashtray must have appeared ridiculous, saying, "Let me show you how I did it." He proceeded to imitate his previous conduct in great detail, suddenly interrupting himself to say, "Now, I'll show you how I do it now." Lighting another cigarette, he tossed the match into the tray, smoked with evident pleasure, flicked his ashes casually in the tray as he talked and finally extinguished his cigarette by crushing the tip against the bottom of the tray and shoving it back and forth through the ashes, remarking with a smile, "Now, I can feel satisfied about it."

Following this, the patient was thanked for his services and dismissed with the understanding that the experiment had been concluded.

Three days later, the patient returned to the author's office in a jubilant frame of mind, declaring excitedly, "*I can do it!*" When asked to explain what he meant, he stated that, on the previous evening, he had been in the company of a girl who had responded warmly to his advances. As usual, upon kissing her, he had experienced an ejaculation. But instead of reacting with his customary sense of shame and depression, his erotic desire had increased, there had been no loss of

his erection, and he had been able to consummate the sexual act, prolonging his pleasure greatly and repeating the act during the night. He was permitted to tell about this experience in detail after which he began to question the author as to the origin and validity of his "cure." Noncommittal replies were made, and he was reminded that, in the past, he had succeeded after a preliminary ejaculation. He protested that no comparison could be drawn between past successes and that of the previous evening which had given him his first sense of genuine sexual satisfaction. Also, his whole psychic attitude and reaction had been entirely new, since he had not experienced any of his customary feelings of fear, shame and inferiority, but on the contrary had felt confident, secure and free. Nevertheless, the author's disbelieving manner caused him to leave the office in a discouraged, doubtful frame of mind.

Several days later, he returned, again jubilant, declaring, "You're wrong, doctor, I am cured." His story very briefly was that, after leaving the office, he had been much depressed by the author's doubts and for two days had continued in a wretched frame of mind. Finally, in order to know the truth, he had secured a girl and had spent the night with her in his apartment. He had begun his lovemaking cautiously, and as his partner responded, he had become increasingly ardent. Since no untoward event occurred, he had lost all doubts and proceeded to the overt sexual act. During the act, a neurotic fear had developed that he might be unable to have an ejaculation, but this fear had been promptly dispelled by an orgasm. After a rest, he had repeated his performance satisfactorily. The next night he had obtained another girl and had confirmed his "cure." (Subsequent investigation into the truth of the patient's story confirmed his report.)

At the close of this account, the patient was asked what explanation of the change in him he could offer. He declared that he had no explanation, that apparently he had spontaneously resolved his conflicts, and that he was satisfied to let things remain as they were. The author suggested that he sit quietly and think hard, letting his mind wander at will, and as he did so, to recall all the various emotions he had so often experienced in conjunction with his precocious ejaculations. After a few moments he flushed, moved uneasily, then soon in a low monotonous tone of voice said, "I see it now—I put my cigarette in the ashtray and it broke—spoiled everything—I felt terrible—just the same way—I see it now—I was afraid to use the ashtray—I'd try to—I'd pat the ashes to be sure there were no sparks—I'd use my trousers." An expression of amusement and understanding appeared on his face. "But I showed you I could do it. Remember? First, I showed you how I acted when I was afraid and then I showed you when I wasn't afraid. Remember how I put it out by rubbing it around?" He paused, his reminiscent manner disappeared, and in a puzzled tone of voice, "Say, that was that complex you suggested to me—say, that explains a hell of a lot to me—I see through a lot of things now—now I know what I meant when I said I could be satisfied." As an amused after-thought he added, "No wonder my feelings were so awful."

An attempt was made to secure an elaboration of these utterances and to elicit an explanation of his apparent identification of the emotions of his neurosis with those aroused by the fabricated story. But he became so ill at ease and appeared to develop such repressive mechanisms against further conscious insight that it was considered unwise to press questions. The only information obtained

was the inadequate statement that "the emotions were just the same," for his ejaculatio praecox and the situation of the suggested conflict.

Several months later, the patient was asked to read and check the accuracy of this account of his problem. When he reached the paragraph containing his "explanation," he put the page aside, saying, "Do you know, doctor, I can't remember what my explanation was. Let me think." Within a few moments, he repeated *in toto* the scene described above, uttering almost exactly the same words. As he concluded, he picked up the page, read it eagerly, exclaiming repeatedly, "That's it, that's it." Again he seemed unwilling or unable to elaborate further, protesting that he had explained the whole matter previously on the basis of the similarity of emotions.

More than a year has elapsed since this experimental procedure. During the first few months, the patient indulged freely in sex relations whenever the opportunity offered, with no recurrence of his symptom. Then, after a period of abstinence, he again developed precocious ejaculation, but without the previous emotional concomitants and without loss of his erection, and in each instance he was able to consummate the sexual act satisfactorily. During the last few months, he had discovered that a mere recollection of the experimental procedure will suffice to inhibit a precocious ejaculation, and he is able to function normally. He does not feel handicapped in any way and is well satisfied with his sexual life, and has not developed any other neurotic symptoms.

DISCUSSION

CAREFUL EXAMINATION of the above report discloses a wealth of complex psychodynamic manifestations which appear to have been elicited as stimulus-response reactions. From these, a number of inferences may be drawn which invite discussion.

Concerning the ultimate soundness of the therapeutic result, there may be legitimate doubt, since the origin of the neurosis and its purposes and function for the personality are not known. However, the fact that the patient can function normally now and can obtain personal satisfactions hitherto impossible indicates definite and significant changes in his personality reactions of clinical validity. Further, the results suggest that the psychoanalytic theory of pregenital fixation in ejaculatio praecox, developed by Abraham,* may not be applicable to every case, since in this instance, it is difficult to comprehend how the experimental measures utilized could have bridged such a gap in libido development.

Another question concerns the possibility that the previous hypnotic experimentation, by developing suggestibility, capacity for dissociation, and responsiveness to direct or implied suggestions, might have influenced his neurosis by giving him special insights or new methods of expression. During that time, however, no improvement from his neurosis occurred. For the same reason, the hypothesis may be excluded that the author's role as combined hypnotist and promised therapist was unconsciously formulated by the patient as one of an authority-surrogate and permissive agent upon whom he could place the responsibility for successful coitus. Further, it may be contended that the mere induction of a strongly emotional state in the hypnotic trance might have constituted a sufficiently vital experience to occasion a reorganization of the psychic economy with a consequent alteration of

the neurotic structure. This is neglected by the fact that, in the previous work, he had been subjected to procedures similar to the one used in this investigation which were equally strongly tinged emotionally though in a different regard. None of these experiences appeared to have had any effect other than that of teaching him how to accept suggestions and how to mobilize his affective responses.

An important consideration is the patient's demonstration of the phenomenon of interpolating into a communication one's own feelings, ideas, and experiences. Given a factually baseless communication, he incorporated it into his mental life, reacted appropriately to it emotionally, and apparently transformed it into a vital part of his psychic life. But in doing so, he interpolated into it past experiences, ideas and affects of other origin, formulating the admixture into a new emotional constellation of greater inclusiveness and significance, to which he reacted in a new fashion, as judged by his subsequent behavior and explanations. The means by which he achieved this elaboration appears to have been his unconscious response to the equating of the various emotions which were centered around a single object and which were aroused simultaneously by the intentionally devised relationships, connotations and symbolizations contained in the story of the complex. His vague desire to possess the girl and at the same time to please her, and his desire to smoke and at the same time to give her something which would eventuate in his own satisfaction were integral parts of his general emotional state in relation to the girl. Similarly, his admiration for the ashtray constituted part of his admiration for her, and the expression of a part of his emotional reactions served as a vicarious expression of the other part. This composite nature of his affective reactions formed an emotional background against which one object could be substituted for another to evoke one or another aspect of a common emotion. Accordingly, the cigarette could acquire thereby the cathexis of the penis and the ashtray that of the vagina with a symbolic representation of the one by the other. *That such symbolic values did obtain is indicated by the concluding part of the experiment in which the patient appeared to develop some form of conscious insight. His fragmentary remarks signify an intermingling of ideas and affects, an equation of the emotions from one source with those of another, and an identification emotionally of the suggested conflict with that of his neurosis.* It is indicated further by the record of his speech and behavior during the time that he had the complex, and by his post-hypnotic discussion, all of which suggests strongly that deep affects not appropriate to the story of the complex were stimulated. Particularly interesting are his naive descriptions of deep emotions, and the physiological concomitants of strong feeling states which he manifested in the first trancelike state of this experiment, namely, profuse perspiration, deep sighing, and strained behavior.

In this same regard arises the question of whether or not deep affects are amorphous in character and are dependent upon stimulation for definition and for direction into channels of expression. The patient's extreme emotional response to the content of the artificial complex suggests, figuratively speaking, the attachment of an amorphous mass of affect to the relatively simple ideas it contained with a consequent disruption of the personality reactions.

A final question for discussion is the rationale of the patient's explanation of

*Abraham, K., "Ejaculatio Praecox," *Selected Papers*, trans. by Woolf, London, Hogarth Press, 1927, chap. XIII, pp. 280-298.

his recovery in terms of the suggested complex. A plausible inference seems to be that, having verbalized the emotions of his neurosis in terms of the trance events during the experimental situation, he had been conditioned to that method of response. Hence, when asked to recall those same emotions and to explain his recovery, he did so in accordance with the established pattern. But as he did so, a new psychic factor, specifically, the mental perspective derived from his successful experiences, gave his utterances a new significance for him, enabling him to declare, "Why, that was the complex—that explains a lot of things to me—now, I know what I meant when I said I could be satisfied!"

SUGGESTED PROBLEMS FOR FURTHER INVESTIGATION

THE AUTHOR is well aware that, however valid the results are in this one instance, no general conclusions concerning the neurosis of ejaculatio praecox or its therapy can be drawn from a single case subjected to a new experimental approach. Nor has this account been offered as a possible solution to such a problem. Rather, the purpose of this report is to direct attention to the practicability of the use of hypnotism as a possibly fertile technique for the laboratory study of the dynamics of human behavior. Any therapeutic aspects of such study are of secondary value until a better understanding of the processes involved is achieved.

Although used profitably in experimental academic work, there has been a tendency to overlook the feasibility of hypnosis as an investigatory agent in the study of psychodynamic problems. This investigation indicates that hypnotic measures can be used in a significantly productive fashion to elicit dynamic responses and to manipulate psychological processes. Although no absolute conclusions can be drawn from the findings above, certain inferences and hypotheses, previously discussed, are warranted concerning the mental mechanisms involved, the dynamic relationships developed, and the methods of determining or influencing behavior and affective responses. These, in turn, suggest a number of definite experimental problems which invite analytical study and of which a few most relevant to this investigation will be presented.

The first of these problems is the practicability of evolving a technique for the development of experimental neuroses in a human subject for laboratory study. The present investigation is not entirely satisfactory experimentally because of some degree of sophistication in the subject. Despite this fact and the crudity of the technique employed, the results obtained suggest significant clinical and experimental possibilities. The study needs to be repeated, however, on a naïve subject with a simpler personality problem such as a specific mild phobia, and in connection with a thorough investigation into the genesis of the symptoms for the purpose of elucidating the experimental results. By means of this procedure, a more comprehensive appreciation of the interrelationships of conflicts and the influence of one complex upon another might conceivably be reached.

A second possibility is that of studying the concept of abreaction. An improved technique similar to that used above, but controlled by continuous observation of the subject and by the centering of his behavior around activities less heavily endowed with affective values and social implications, might offer a good approach to an experimental investigation of the nature, mechanisms, and methods

of induction of abreactive processes. A counterpart of experimentally induced abreaction may be found in the "living-out" of fantasies in the psychoanalytic procedure, the clinical results of which also suggest the feasibility of studying abreaction in a laboratory setting.

Another investigatory aspect would be that of devising a technique whereby the subject could be induced to select from a communication the material requisite to form a complex. The present experiment indicates that such a selection was made in this study, since the fabricated story symbolized also an Oedipus complex and a sister-incest situation to which the patient apparently did not react. Such a technique might serve materially to disclose natural complexes and to reveal personality trends and types. Huston *et al.*, referred to above, found suggestive evidence that the hypnotic induction of complexes served to reveal natural complexes. Malamud and Linder* have also made an approach to this problem from another angle by showing pictures to patients and then obtaining reports of their subsequent dreams.

The patient's emotional behavior during the experiment gives rise to the conjecture that affective responses may be "conditioned" somewhat like the conditioning of neuromuscular responses. This might conceivably be accomplished by arousing deep affects upon which, as a direct sequence, a second emotional situation could be created. An illustration of this is to be found above in the establishment of an effectively significant heterosexual situation out of which arose a special emotional state. From such experimentation, by noting sequences, direction, methods of expression, and purposes served, information regarding the genesis, attachment, and interrelationships of emotional reactions might possibly be obtained.

An approach to some of the problems of symbolization is also suggested by this report. The role of similarity of affects in producing symbolic values may be inferred from the patient's account of his recovery. Experimentation designed to attach similar affective tones to dissimilar objects or concepts might conceivably yield information regarding the development of symbolic equivalents. To illustrate, the present experiment might be repeated by arousing the affects of the Oedipus complex, followed by a second emotional situation centered around a fabricated role of authority exercised by the subject. Verbalization of the one situation in terms of the other would possibly indicate the establishment of symbolic values. Or, if the patient's symbolization resulted from the connotations and the relationships of the ideas communicated to him, experimental procedures based on temporal contiguity and association of ideas might give pertinent results.

Another problem is concerned with the question of the development of insight, the factors controlling its growth, its influence upon mental structures, and its function in the psychic economy. The patient studied apparently acquired insights, some complete, others partial, presumably as a result both of the sequences and the nature of his behavior. The same technique, but with continuous observation of the subject and an adequate objective record of his behavior before, during, and after the experiment, might serve to give an appreciation of any progressive manifestations of insight. Or, the omission of certain parts of the procedure, the

*Malamud, W. and Linder, F. E., "Dreams and their relationship to recent impressions," *Arch. Neurol. Psych.*, Feb. 1931, xxv, 1081-99.

changing of sequences in the experimental behavior, or the introduction of new measures, might determine the relative importance of the various experimental steps. For example, what would have been the ultimate result in this case had the patient failed to demonstrate, "how I do it now," or had he been informed of the experimental procedure by the author instead of recalling it himself?

SUMMARY

A PATIENT SEEKING A THERAPY for a neurosis of ejaculatio praecox was subjected to an experimental procedure wherein an attempt was made to induce in him a second neurosis by means of a hypnotically implanted complex. This complex had been formulated to symbolize or to parallel his actual neurosis. In consequence of this procedure, there appeared to result an identification of the induced conflict with his original neurosis and a fusing of their affective reactions. After the patient had been forced to relive, abreast, and gain insight into the suggested conflict, it was discovered that he had made a clinical recovery from his original neurosis and that he was still able to function normally a year later. A discussion is given in which possible psychological processes and mechanisms underlying the experimental results are elaborated, the ultimate soundness of the therapeutic results is questioned, and emphasis is placed upon the practicability of hypnosis as an experimental procedure in the analysis of personality disturbances. There follows a list of certain specific problems suggested by this study.

Part II.

The Method Employed To Formulate a Complex Story for the Induction of the Experimental Neurosis*

DISCUSSIONS WITH MARGARET MEAD, Gregory Bateson, Lewis B. Hill and others on hypnotic techniques of suggestion and methods of interpersonal communications suggested the possible value of presenting in detail the explanation of how the foregoing complex was fabricated. Such an analysis seems warranted by the continued experience of the superiority of this general type of technical procedure in inducing extensive changes in the behavior of hypnotized subjects, as contrasted to the less satisfactory results secured from spontaneous, unplanned, haphazard suggestions or when the same degree of detailed care is not exercised in building up hypnotic suggestions and hypnotic situations.

In considering how to devise or formulate a suitable complex, the problem seemed to be essentially one of, "It is not only what you say, but how you say it." Under the proposed experimental conditions, "what" was to be said had to be a seemingly innocuous and credible but fictitious story of a past forgotten social error by the subject. The content of such a story was relatively simple to determine and required little imagination since the patient had been a hypnotic subject of mine for over a year and I knew him intimately, was well acquainted with his family, and I also had professional knowledge of his neurosis. Hence, the content of the story was easily made to center around an imaginary visit at the home of an unidentified prominent man. There he was supposedly greeted by the man's wife, introduced to an attractive only daughter in whose presence he smoked a cigarette and accidentally broke a prized ashtray.

The "how" of telling this story seemed primarily a task of so relating the fictitious account that it would become superimposed upon the subject's experiential past in a manner that would cause him to react to it emotionally, to incorporate it into his real memories and, thus, to transform it into a vital part of his psychic life.

This could be done, it was reasoned, by taking the objective items contained in the story and so weaving a narrative about them that they would stimulate a wealth and variety of emotions, memories, and associations that would in turn give the story a second and much greater significance and validity than could its apparent content.

This would require a careful choice and use of words which would carry multiple meanings, associations, connotations, and nuances of meaning which would serve to build up in a gradual, unrecognized, cumulative fashion a second more extensive but unrealized meaningfulness for the story.

The words, by their arrangement into phrases, clauses, and sentences, and even

**J. Gen. Psychol.*, 1944, 31, 67-84.

their introductory, transitional, and repetitive uses, could be made to serve special purposes: building up emphasis or cutting it short, establishing contrasts, similarities, parallelisms, identifications, and equations of one idea to another, all of which would effect a building up of a series of associations and emotional responses stimulated, but not aroused directly, one idea to another, sequential relationships of various ideas and objects, shifts of responsibility and action from one character to another; the use of words that threatened, challenged, distracted, or served only to delay the development of the narrative were all employed to formulate a story possessing a significance beyond its formal content.

It must be noted that the patient had been a hypnotic subject of mine for a long time and that, therefore, he had had a wealth of experience in responding to both direct and indirect suggestions. Thus his experiential background was of a character to enable him to react adequately to the indirect, concealed, and disguised suggestions and significances of the fictitious story.

The hypnotist, in administering the complex, was fully aware of what he hoped each item of the story might mean to the patient. Hence, the hypnotist's voice in administering that complex would carry a load of meaningful intonations, inflections, emphases, and pauses, all of which, as common daily experience constantly proves, so often convey more than spoken words.

Essentially, the task was comparable to that of composing music intended to produce a certain effect upon the listener. Words and ideas, rather than notes of music, were employed in selected sequences, patterns, and rhythms. By this composition, it was hoped to evoke profound responses in the subject, not only in terms of what the story could mean but also from his experiential past.

How well this was done, aside from the experimental results secured, is a matter for speculation. No proof can be offered that the explanation of the complex offered is correct, or that someone else, using the same words could not construct an entirely different explanation. Proof, if there is to be any, can at best only be inferential. However, continued experience with the greater effectiveness of hypnotic suggestions carefully calculated as to structure, as contrasted to the lesser effectiveness of spontaneous suggestions primarily concerned with an obvious content, indicates that this initial effort at an analysis of an interpersonal communication of a particular type is warranted.

The actual process of composing the story was accomplished over a period of several weeks; it was rewritten in various wordings many times before it seemed to be satisfactory. Two colleagues read and discussed the proposed complex story and contributed a number of helpful suggestions. Other colleagues contributed unwittingly by discussing, upon request, the meaningfulness of sentences worded in slightly different ways. Items of fact relating to the patient, such as his attitudes toward his parents, conversational clichés, patterns of behavior, and actual experiences were all kept in mind and worked directly or indirectly into the story at every opportunity so that it might have a special and unique appeal for the patient.

As a method of presenting the explanation, the story as devised will be given in the first column and the explanation, logic, intended significances, hoped-for reactions and responses will be given in the second column in the form of comments. These are listed as they were formulated for the final draft of the complex. The reader must bear in mind that these explanatory remarks constitute only pre-

experimental formulations of what the complex might possibly mean to the subject. Hence, they are not necessarily to be taken at face value. They constitute simply a pre-experimental effort to determine the possible meanings of an intended specific interpersonal communication in a special situation. In a few instances, it was possible to confirm the validity of a number of these comments post-experimentally. For the most part, such confirmation was not actually feasible and was precluded by the experimental situation.

The complex	Explanatory remarks
Now	"Now" relates to the present, the immediate, circumscribed, highly limited present; it will not bear upon the past, nor upon the future; it is safe, secure.
as you continue	"You" is a soft word; the subject is introduced gently. "Continue" is a most important word, since it carries on into the future, it contradicts "now," which relates to the present, and it introduces an indefinite extension into the future. Hence, the subject unwittingly makes a change from the "now" situation into a continuing future situation.
to sleep	Thus he has the time situation changed and at the same moment is given a command to "continue to sleep," a command based upon the past, including the present and extending into the remote future.
I'm going	First person pronoun, which means that anything done is to be done by the hypnotist and that the subject can be safely passive. "Going" carries on the future connotation of "continue," but enlarges it by bringing both the hypnotist and the subject into the continuation into the future.
to recall	"Recall" signifies the past, and we are both going into the future, taking with us the past.
to your mind	Second person pronoun; emphasizing that we are both going into the future taking with us the past. "Mind" is a selected, important, most important part of him, a part of him related to the past.
an event	"An" means just one, a certain one and yet is at the same time so indefinite. "Event" is a specific word; just one event, "an event," and yet, despite its seeming specificity, it is so general that one cannot seize upon it or resist or reject it or do anything but accept "an event."
which occurred	"Occurred" is a narrative word; lots of things occur, especially minor things.
not	If the subject wishes to reject, deny, or contradict, the word "not" gives him full opportunity. He can seize upon it and attach to it all of his resistances to an acceptance of the story; it is literally a decoy word to attract his resistances. The sequences are "occurred not," in other words, "did not occur," but, even should his resistances seize upon "not," that decoy is legitimately snatched away by the next two words, and thus his resistances are mustered, mobilized, but left unattached and frustrated.
long ago.	Actually "not long ago,"—"not" now destroys itself as a negative word; it is positive in that sequence. Furthermore, it is highly specific, but in a vague, general way; when is "not long ago"? Yesterday? Last week? Also "not long ago" is real, since we do have a "not long ago" in our lives; thus a weight of truth is given which will radiate.
As I recount	First person again, assuming responsibility. Previously, I was going "to recall," but in this phrase I immediately

The complex	Explanatory remarks
this	withdraw from that responsibility. Now, I am only going to "recount," and "recount" and "recall" are totally different words. Thus, the responsibility for a "recall," which was the initial task, is rejected by the hypnotist, who assumes the responsibility only for recounting. Therefore, if the hypnotist recounts, the subject is thereby compelled to recall. Indeed if the hypnotist can recount, and there can be no doubt about that, then the subject can, actually can, recall; a sophistical but indisputable establishment of the truth of the story to be told.
event to you,	"This" like "an" is a definitive word than cannot be disputed; and readiness to dispute or deny must be held in abeyance.
	Again a specific word.
you will	Second person; first it was recalled to "your mind," and now it is recount "to you," that is, to him as a person. Thus he is introduced so that, in his passive acceptance of the recounting, he, as a person, can assume responsibility.
recall	The subject is called upon to act as a person, and at the same time is given a command.
fully and completely	"Recall" completes the shift of responsibility from first to second person, with a final allocation of responsibility for recounting and for recalling.
everything	These are distraction words since they attract attention not to the task, but to the size or quality of the task. Hence, he must first refuse to do it "fully and completely" before he can refuse to do the task at all, and if he refuses to do it "fully and completely," he is, by implication, obligating himself to do it at least in part, until he goes through the process of refusing to do it in toto. All this takes so much time that there is no opportunity to go through those mental processes permitting a logical rejection of the entire task. Additionally, if he still has resistances to the hypnotic situation, he can mobilize them against these distraction words.
that happened.	"Everything" is really a threatening word; to tell everything is something one just does not do. So here is an opportunity to mobilize resistance, since, if he is to accept this story, his resistances must first be mobilized as a preliminary to a dispersion. Also, if he refuses to tell "everything," he is thereby affirming that there is something to tell.
You have had good reason to forget	The command to tell "everything" is now seemingly qualified, since it is not "everything," but just the bald facts of "what happened," not the meanings or personal implications. Again there is an implication of other things.
this occurrence,	Second person, reemphasizing the subject's role as someone involved.
but	There is not only a "reason," but a "good reason," at that! We all like to think we have a "good reason"; it vindicates.
as I recall it,	Now the "good reason" becomes inexplicably transformed into a "bad" reason; "good" no longer is "good," but is really a bad sort of thing; the kind of reason one likes to forget. Also, "to forget" explains the need "to recall," and explains the recounting. But what does one forget? Bad things, especially!
	Explicit word, intended to reemphasize the feeling of specificity.
	"Occurred" was a narrative word, and now the word is "occurrence," so often a euphemism applied to bad things one forgets.
	"But" always prefacing unpleasant things; "let's have no 'buts' about it," is so common an expression.
	This phrasing is a reprieve, since the first person assumes the responsi-

The complex	Explanatory remarks
you will remember each and every detail fully.	bility, but he who can assume responsibility can also assign it. Thus, indirectly, the dominance of the hypnotist is assured, and the next words lead to active work for the subject.
Now	More than recall is wanted. Previously, it was "you will recall"; now it is more "you will remember"; furthermore, "remember" is in itself a simple, direct, hypnotic suggestion, similar to the suggestion of "sleep" in the opening sentence. Also, what is to be remembered is "each and every detail", so that refusal to remember has to be directed to each detail, not to the whole occurrence. Thus, "each" and "every" and "fully" are distraction words, directing refusal or rejection to a quality of performance.
bear this in mind, that while I repeat	"Now" harks back to the first word of the first sentence, a word that could be fully accepted. Thus, utilization is made of that first attitude.
what I know of this event,	"Mind" harks back to the first sentence again for a similar reason.
you will recall fully and completely	"Repeat" is a word which relates to a factual experience in the past, one that really occurred and is known, since otherwise it could not be repeated by someone. Also, the role of the hypnotist is clearly defined and cannot be disputed.
everything just as it happened,	"Repeat" and "know" affirm and establish the truth, but give an avenue of escape, because the qualification of what "I know" implies that there may be much that "I" don't know, and therefore something additional that he does know.
and more than that, you will re-experience the various conflicting emotions which you had at the time and you will feel	This phrasing harks back and reaffirms the original allocation of responsibility to "you." "Fully and completely" is again a repeated distraction, reinforcing the previous use of those words.
exactly as you did while this occurrence was taking place.	That meaningful, even threatening word again.
Now	A qualification that limits the comforts since it excludes possible personal implications and meanings.
the particular event of which I am going to tell you is this:	Further threatening since "more," what "more," is wanted.
Some time ago you met a man prominent in academic circles	Still carrying the threat.
	A hypnotic command carrying compulsion.
	The thing is now defined as conflicting and as emotional, of which things he had a plenty, all real, and, above all, emotional.
	A specific but unidentified "time" in the past, but a time related to "conflicting emotions."
	A hypnotic command that he is to feel, which carries a threat since it follows "conflicting emotions."
	The thing is defined and outlined, his course of action indicated to be a revivification, only that, of a past experience, not a confession, just a re-experiencing of something that took place.
	Harking back to the opening word, repeated later for its acceptance values immediately after the assignment of a task, and once again repeated here at a similar point.
	"An event," "an occurrence" now becomes a highly specific item.
	"I" can tell only what little "I know," a casual statement, transitional in its use, reasuring in its implications.
	"Not long ago" redefined, but still vague and elusive of contradiction. Indisputably true and acceptable.
	We like to know "prominent" people, an initial appeal to narcissism.
	A narrowing of the identification of the man, but safely so!

The complex	Explanatory remarks
who manifested an interest in you and who was in a position to aid you	A strong appeal to narcissism. A tentative threat, because "position," synonym of power, can be used favorably or unfavorably. Narcissism reinforced and reassured, but more than that, the subject now wants to know, to identify, the man, and, hence, is open readily to suggestion.
in securing a certain research fellowship in which you were much interested.	Highly specific but not definitive.
He made an appointment with you to see him at his home and on that day you called at the designated hour.	A true statement in that he was interested in a fellowship, actually any fellowship, but this statement offers no opportunity to take issue or dispute, since each item is progressively qualified, and each qualification requires dispute before the initial premise can be attacked, and his narcissism requires that he accept each item in the suggestions. Thus, resistance is dispersed. Additionally, the man is "interested," the subject is "interested," there is a common denominator, and the reality of the subject's interest radiates to and substantiates the man's interest. A third person taking all responsibility. Therefore, the subject can listen receptively, since the story is about a third person. This is a disputable statement, and hence is to be qualified in more and more detailed and specific fashion, thus to preclude any upsurge of resistance or rejection, and each little item to be added must have a cumulative effect that takes the subject ever farther from the essential point. A qualification as to place.
When you knocked at the door you were met not by this gentleman but by his wife	A qualification as to a specific day that must be selected out of the past. "Designated" is so specific, final, absolute, and yet so indefinite. A final specific qualification for the appointment, and it is most important to establish that appointment. Thus the subject is led to a home, to "that day," to a "designated hour." With such detail, not even a thought can flash obstructively in his mind since the only measure open to him in the hypnotic situation is to reject a "designated hour" of a specific day at a home of an interested man whom, narcissistically, he wanted. Thus, an idea has been offered, and its acceptance literally forced. Therefore an opportunity to resist something about this rapidly growing story must be given him in return for being forced to accept some ideas. A challenging word, anything can happen "when." Second person active, giving opportunity for him to get set for action. A brief item of detail, momentarily obstructing action. "You" is second person passive—thus he is forced from the active to the passive role. "Were met" a dogmatic declaration which is the opening for all resistance and rejection, an opportunity to interpolate from past experience, a wide open door for dismissal of the entire story, and thus, a chance for him to construct his own account. A negative word, emphatically negative. Apparently, it is unnecessary to deny, reject or dispute the story, since the hypnotist is doing that by the implications of "you were not met." Thus, the subject's resistances have been built up and then lulled into inaction, and rendered futile by the negations employed. "But" used a second time, this time in close association with a woman

The complex	Explanatory remarks
who greeted you cordially and was very friendly, making you feel	to reinforce possible previous unpleasant associations, since a wife is a sexualized woman. Also, this is another disputable statement, but before he can remobilize his resistances, the total situation is completely changed by the next words.
that her husband had given a good account of you to her. She explained apologetically	A tremendous appeal is made to his narcissism, already stimulated previously. One likes to be greeted cordially by a "prominent" man's wife. "Feel" means respond emotionally, a safe secure situation for responding to narcissism. Also, the word is a direct call for narcissistic response. At the same time there is given the simple direct hypnotic command of "you feel."
that her husband had been called away for a few moments	Full opportunity offered for unrestrictive narcissism in a safe secure fashion. All that has been told now rests upon secure foundation of narcissistic satisfactions. He needs this story.
but that he would return shortly and had asked that you be made comfortable in the library.	An indirect attack upon his narcissism—this gracious woman who flattered him now becoming apologetic? That must not be so, because whatever that cordial woman does must be right, and he will make it so. Apologies and praise in that combination are not good. A faint, remote realization that he was alone with a woman who was a wife and hence a recognized sexual object.
You accompanied her to this room where she introduced you to a charming girl who was obviously rather shy and re- served and who, she ex- plained,	A limitation of the danger, and hence he is safe, although alone with a woman. "Shortly" is so specifically vague and reassuring. "You," the person, introduced again. Gracious man, gracious woman, narcissistic satisfactions reinforced. A distraction phrase. Yet, to be made comfortable by a lone woman in the safe confines of a library is like inviting a girl to meet you in the sitting room of your hotel suite,—a faint suggestive implication. Second person active. Reduction of possible fear by specificity in mentioning only this room—but what is to happen? A woman active in his company—something will happen! For him there can be no greater threat in all the world than a charming girl. A terrifying threatening situation, loaded with tension, firmly established by his past. The threat castrated, and he was master. Thus his fears were aroused and immediately lessened.
was their only daughter.	First she explained apologetically and unacceptably, now she explains in reaction to a threat—will these displeasing explanations never end! A direct opportunity for relief of tension, directed against unnecessary social amenities conducted in such a terrifying situation, but serving to introduce mother antagonism. A very special kind of daughter, all the more threatening despite the castration. Thus a useless, only temporary castration was performed

The complex	Explanatory remarks
	and while it did relieve his tension briefly, that tension has been revived and intensified.
The mother	An immediate shift from the threatening daughter to the displeasing mother, permitting his tension to increase.
then requested your permission	This cordial, gracious, apologetic woman, who led him into a trap, she was nice, certainly he would do anything for her, especially since it would change the total situation by letting him deal with the mother and not the daughter.
to go about her work, explaining	Work is a far cry from social pleasures, remote and distant, and thus she was removing herself far from him, leaving him alone with danger. That unpleasant word again, first used to rob him of narcissistic pleasure, then to lead him into a danger situation. What now?
that the daughter	Special, precious, only daughter—charming girl. A peculiar threat, challenge and danger all combined.
would be very happy to entertain you while you waited.	To be entertained by a charming girl with the mother's connivance!
You assured the mother	"Waited" for what? "Waited," a threatening word, expressive of his passive helplessness. He could only wait, and in the past he had so often "waited" in the company of a charming girl.
that you would be very comfortable and even now you can recall	"Assured" carries connotations about risks and dangers. Who led you into a trap, a danger situation—opportunity for intense resentment and tension relief.
the glow of pleasure you experienced	"Comfortable," with a girl? Past history proves the mockery of that.
at the thought of having the daughter as a hostess.	Harking back to the first "now" and reutilizing its "present" values. Harking back to the first use of "recall" and thus tying tightly everything together.
As the mother left the room	Harking back to "reexperience the various conflicting emotions." If there were conflicting emotions, some were glows of pleasure, and now his situation is one of a conflict, of attractive and shy, of charming and only daughter, of mother coming and not staying and praising and apologizing, pleasure and unpleasure.
you set about conversing	"Having the daughter," possessing the charming girl—synonymous phrases. Dance-hall hostess? He had had hostesses before, and now there is given the suggestion that he have the "daughter as a hostess."
with the girl, and despite her shyness and bashfulness, you soon found that she was	A distraction by shifting attention away from the immediate threat of the girl, and hence readily accepted even though it leaves him alone with his danger.
as attractive conversationally as she	Second person introduced. "Set about" implies action, doing something. "Conversing" is a safe activity, but it is a euphemism, and what thinking one can do as he converses! Alone with a dangerous girl brought to full realization. Despite those qualities, what else! What danger threatens?
	Continuation of the threat. What was she? An only daughter, a charming girl, a daughter as a hostess?
	Safe, yet unsafe, physically pleasing, capable of conversation, capable as a hostess?

The complex	Explanatory remarks
was pleasing to the eye. You soon learned	Second person again emphasized. He had learned much about her, too much, and now what more was to be learned about this charming girl so pleasing to the eye?
that she was much interested in painting, had attended art school, and was really interested in art. She timidly showed you some vases she had painted. Finally	Repetition of the word "interested." In what could she, in this danger situation, be interested? "Painting"? Painting the town red? A euphemism? He had done commercial art to pay his way through college, so there was something in common, a common interest—to be profoundly interested in art would mean that she was interested in <i>his</i> art and his art was part of him. A part of him? A shift from him to her.
she showed you a delicate little glass dish which she had painted in a very artistic manner, explaining that she had decorated it as an ash-tray for her father, to be used more as an ornament than as an actual ash-tray.	A dangerous girl being timid? Girl-boy behavior, coy, luring behavior? Presented to you. A symbol innocuously introduced, and with the word "painted" establishing their common interest in doing something. This is a threatening word. It establishes a moment surcharged with finality, a grand finale is about to be! Previously she timidly "showed," but now where is that timidity? The situation has changed! Fragile, precious thing, easily shattered by masculine strength so like the girl. Something on which she had lavished attention.
You admired it very greatly.	Lavished care in a special sort of way that he and she together could both appreciate. That word of previously unsatisfactory connotations. Charming girl, precious possession, father's ownership and priority.
This mention of using the dish as an ash-tray made you desirous of smoking.	There is something in this danger situation to be used! An ornament can decorate a pleasing body. It's not an ash-tray! It's something different. Thus, the symbolic value is clearly established. It is just called an ash-tray, but it is an ornament belonging to her and over which the father exercises some undetermined undefined authority. "It" was what she had, she was attractive, pleasing to the eye. Redundant superlative! In other words a special significance is to be attached to this symbol, a significance in relation to admiration in the presence of a physically attractive girl. Some things are just "mentioned," hinted at, not said in a forthright manner. But it is not a "dish," it is not a vase, it is not even an ash-tray, it is just an ornament that belongs to her and to her father in a peculiar sort of way. One wishes to smoke, but becomes "desirous" in the presence of a pretty girl. A euphemism, a safe conventional way of giving expression to the feeling of being "desirous," actually a pattern of behavior taken out of his past, since smoking was used by him in his problem situation as a distraction.

The complex	Explanatory remarks
Because of her youth you hesitated to give her a cigarette.	Not "youth" really, though she was fresh and pretty and youthful, but something that "youth" connoted, something not to be expressed. One may eye an attractive girl and be "desirous" and "hesitate." Thus a sexual motif becomes more evident. Besides, one does not hesitate to smoke in the presence of youth. A symbolic ash-tray, an ornament belonging to her in which both she and he were "interested" in a special way, with a father lurking in the background. The words "desirous," "smoking," "youth," "hesitate" all constitute a background for a symbolic cigarette that fits a symbolic ash-tray.
Also, you did not know how her father might feel about such things and yet you wanted to observe the courtesies of smoking.	There is something else left unsaid as yet, an implication repeatedly established by transitional words. Father lurking in the background reinforced.
As you debated this problem you became increasingly impatient.	What are "such things" in the presence of a youthful girl that might arouse a father's ire? A long history of "wanting," "wanting," in the presence of every pretty girl. A euphemism, since what else can be said?
The girl did not offer you a cigarette and thus solve your problem and you kept wishing that you might offer her a cigarette.	One does not debate about smoking, one debates for deep reasons, one strives against and tries to controvert the forces against him in a debate. He had a "problem," a most troublesome problem in relation to girls and he is "debating" a "problem" in a girl's presence. Not over smoking does one become "increasingly impatient," but only over vital problems.
Finally in desperation you asked her permission to smoke which she granted very readily and you took a cigarette but did not offer her one.	"The girl" follows "increasingly impatient" and by that juxtaposition a relationship is established between "the girl" and the feelings described. She failed him like all other girls he had known, equating her with those other girls who did not solve his "problem." "Wishing" just "wishing" in direct connection with a girl who had failed to solve his "problem," an old, old story for him. If only he "might," really "could" do something. "They satisfy," was one of his clichés, and he did want satisfaction. The conventional and the sexual motifs intermingled—satisfaction in relation to a girl, a symbolic ash-tray, being "desirous" and his "problem." Another final moment, with implications of other things. Strong, bitter, frustrated emotions constitute desperation, and it does not derive from being deprived of a cigarette. The role of being miserable, a suppliant, incapable of self-determined action. A long history of smoking in his "problem" situation to cover up and conceal his disability. A permissive, willing girl, readily granting favors,—another item taken out of his past history. That was all he could do, and which he had so often done in the past. She had no pleasure, she was unsatisfied. Past history still being utilized.

The complex	Explanatory remarks
As you smoked you looked about for an ash-tray and the girl, noticing your glance, urged you to use the ash- tray she had de- signed for her father.	He couldn't do anything else, as he had proved many times. Did she notice? Did all those girls of the past notice your glance, your look? "For an ash-tray and the girl," making them in this juxtaposition a single object to be looked for. Also, another cliché was "ashes hauled." Not only permissive, but urgent, active, aggressive. An "ash-tray she had designed" for what? She had only decorated it for father.
Hesitantly you did so and began talking on various topics. As you talked you became aware of a rapidly mounting impatience for her father's re- turn.	Father's special thing, unused by him and not intended for his use, but only for an ornament over which he exercises an undefined authority. Again he "hesitates," but more than that, the word "hesitantly" implies insecurity, uncertainty, even fears. "Hesitantly, you did so," in other words disposed of "ashes" in a for- bidden object. A technique of self-distraction and of distraction for the girl often em- ployed in the past. "Mounting" is a word he often used with special significance. He was always "impatient to mount" before "something happened" that meant the end of the attempt to succeed. Incongruous words!
Shortly you became so impatient that you could not enjoy smoking any longer, and so great was your impatience and distress that instead of care- fully putting out your cigarette and then dropping it in the ash-tray, you simply dropped the lighted cigarette into the ash-tray and continued to converse with the girl.	What choice is there between "father's return" in a seduction situation and ejaculatio praecox? Any ending, however tragic, is needed to bring to a close an impotence situation. This is only another "impatient" situation, thereby it is equated with other "impatient" situations. Past history repeated. Was that why the slogan "they satisfy" was his cliché?
The girl apparently took no notice of the act but after a few min- utes you suddenly heard a loud crack and you immedi- ately realized that the cigarette you	Those words can describe only something more vital than smoking. They are pertinent to past experiences. The whole performance was of no value—it was futile, useless, hopeless, fraught with distressing emotions. "Lighted cigarette" and ashes just dropped futilely. Past history, in that he could only conclude by conversing with the girl. "Apparently" carries a weight of hope. There are acts and then, there is "the act," and this was an act that preceded his despairing resignation to mere conversation with a girl, a girl who "took no notice," a parallel of many previous instances. "The crack that never heals" was a paraphrase from a song often em- ployed by him to vent sadistic reactions. He had often bitterly described his repeated efforts and failures on a single occasion as an attempt "to take a crack in pieces."

The complex	Explanatory remarks
had dropped into the ash-tray had continued burning and had heated the glass unevenly, with the result that it had cracked in pieces.	
You felt very badly about this, but the girl very kindly and generously insisted that it was a matter of small moment, that she had not yet given the ash-tray to her father,	Redundancy, strained superlative to carry extreme emotional weight. "This" is one thing, "the girl" is another, another juxtaposition of two items that are to be equated. Permissive, granting, urgent, now maternally kind and forgiving—copied from past experiences. An unnamed "it." Past history again, carrying the same load of bitter ironic significance. What he did was of "small moment." Further ironic truth.
that he would not know anything about it, and that he would not be disappointed. Nevertheless, you felt exceedingly guilty about your carelessness in breaking the ash-tray. and you wondered about how her father would feel about it if he ever learned of it. Your concern was plainly evident, and when the mother came into the room you tried to explain, but she graciously reassured you and told you that it really did not matter.	First maternal, now the girl speaks for her father, thus combining maternal and paternal attitudes in her forbearance. "Not anything," a secret was to be kept, a guilty secret. Still an unnamed "it." A seriously tense situation does not warrant such a mild word as "disappointed." "Disappointed" is a euphemism and at the same time signifies that the situation warrants the mockery implied by "small moment." "Nevertheless" implies the existence of certain other facts. Fitting words, but not for the superficial content. A euphemism since exceeding guilt does not attach to an ashtray. How many times had he "wondered" in similarly emotionally charged situations? Man of power, authority, prior rights. Not think but "feel," since this was a matter for profound emotion. "Ever learned"—a continuing threat implied. How many times in the past had his concern been evident? Maternal retribution, forgiveness, or what? You really did try, you've always tried, but it always ends the same old way. Forgiveness, not retribution, always forgiveness as in the past. "Small moment" ironically brought home by the one who should be most bitter.

The complex	Explanatory remarks
However, you felt most uncomfortable about it and it seemed to you that the girl felt badly too. Shortly after this a telephone call was received from the father stating that he was called away for the rest of the day and asking your permission to see you on a later day.	A conventional way of saying something too vital to be put into words. Like other unsatisfied girls who masked their disappointment by maternal behavior, who did not reveal that they had been "badly" used. A reprieve, a postponement.
You left the house very gladly, feeling most wretched about the whole situation and realizing at the time that there was really nothing you could do about it. Now after you are awokened	"Your permission," when he has been wronged and violated in relation to his only daughter. The whole situation now radiates beyond the room, reaches out into the fabric of the social situation, the educational situation, infringes upon and enters into everything, and continues to a "later day." Hence, it is not ended yet, but reaches indefinitely into the future. That was all it was, a "whole situation." A pun upon another cliché he employed when distressed about his disability.
this whole situation will be on your mind. You will not consciously know what it is but, nevertheless, it will be on your mind, it will worry you and govern your actions and your speech although you will not be aware that it is doing so.	A final, despairing repetition of the teachings of the past.
I have just told you of a recent experience of yours, and as I recounted it to you, you recalled it in detail, realizing the whole time that I gave you a fairly accurate account of the situation, that I gave the essential story.	The original "now" situation continuing into the immediate future with the repetition of the word "now" reestablishing the original receptive attitude. Pun repeated in relation to the immediate future. Hypnotic suggestions, with careful emphasis upon the second person pronoun.
	A brief summary of first and second person activities with allocation of responsibilities and definition of roles reiterated.

The complex	Explanatory remarks
After you awaken the whole situation will be on your mind but you will not be conscious of what it is, you will not even be aware of what it might be, but it will worry you and it will govern your speech and your actions.	A final shifting of all action upon the second person and repetition of hypnotic suggestions.
Do you understand?	A final command, request and plea that in itself signifies that there is much to be understood.
And you do feel badly about this thing.	A simple statement in the present tense that concludes with the ambiguous reproachful sounding phrase "this thing" of such utterly unpleasant connotations.

DISCUSSION

THAT ALL OF THIS LABOR was warranted in devising a complex is, at first thought, questionable. Previous experience had disclosed that complexes could be devised easily which would exert significant influences upon the behavior of hypnotic subjects. However, such influences were found to be uncertain, unreliable, and unpredictable. That same investigation, as well as other experimental work, had shown that hypnotic subjects could reject complexes for even minor reasons or mere whims.

In this particular experiment, the total situation made heavy demands. Not only was the subject to accept the complex and to have his behavior influenced by it, but he was also to develop an artificial neurosis which would parallel his actual neurosis. Thus, the experimental situation required of the subject a highly specific type of behavioral reactions, determinable only by his personality structure, which would be expressive of responses, at a symbolic level, to the implications rather than to the actual content of the story.

Just what forms such responsive symbolic behavior would take was entirely a matter of speculation. For example, phobic reactions about smoking were anticipated but it was not realized these phobic reactions would lead to a ready acceptance of a cigarette for smoking and then result in a fearful dusting of the ashes into his trousers' cuff, with a subsequent spontaneous equating of this specific behavior with the consequences of a premature ejaculation. Such symbolic equating of two different types of behavior in relation to his trousers can be explained only in terms of the intended special meanings of the complex story. Hence, the results suggest that, at least in this type of interpersonal communication, the method by which a story is told may be even more important than its content.

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Automatic Drawing in the Treatment of an Obsessional Depression*

NO MATTER HOW ACCURATE any body of scientific theory may be, its confirmation by the use of some technique other than that on which the theory first rested is always valuable. This is the most convincing way of ruling out the misleading influence of possible undetected methodological fallacies. With this in mind, the following case is reported in detail because, by means of a nonpsychoanalytic technique, it illustrates a certain type of symbolic activity which is comparable in character to that studied by psychoanalysis in dreams and in psychotic states, and because of its clear demonstration of certain of the dynamic relationships which exist between conscious and unconscious aspects of the human psyche. Finally, it is reported because of our interest in this general type of technique as a means of uncovering unconscious material, and because of the challenge this may offer to certain phases of psychoanalytic technique.

HISTORY

A 24-YEAR-OLD GIRL attended a clinical demonstration of hypnosis for a class in psychology at the university. At this demonstration, particular emphasis was laid on the phenomenon of automatic writing and on the integrated functioning of subconscious processes as a seemingly independent entity in the total psyche. Afterwards, she inquired at length about the possibility of acquiring the ability to do automatic writing herself, and whether it was probable or possible that her own unconscious might function in a coordinated, integrated fashion without her conscious awareness. Affirmative replies were given to both inquiries. Thereupon, as the explanation of her interest, she volunteered the statement that, during the preceding month, she had become unhappy and uneasy in all her relationships for some unknown reason, and that she was becoming increasingly "worried, unhappy and depressed," despite the fact that she knew of no personal problem that could trouble her seriously. She then asked if she might try automatic writing through which her unconscious, acting independently, could give an account of whatever was troubling her. She was told that she might try this plan if she were really interested, and she responded that first she would like to have a formal psychiatric review of her life.

Accordingly, on the next day, she was interviewed at length. The more important data obtained in this interview may be summarized as follows:

1. She was an only child, idolized by her parents, as they in turn were by her, living in what seemed to be a very happy home.
2. Her adjustments to college had been excellent until the preceding month, when her work had begun to suffer seriously in consequence of the sudden development of "worry," "concern," "fear," "unhappiness," and "horrible depression," which persisted almost continuously and for which she knew no cause whatever.

**Psychoanal. Quart.*, 1938, 7, 443-466. (With Lawrence S. Kubie).

3. Recently, she had been impelled to read some psychoanalytic literature and had found the subject of symbolism "most interesting and fascinating," but "silly," "meaningless," and "without any scientific validity." When asked for the references, she replied, "Oh, I just thumbed through a lot of books and journals in the library, but the only thing that interested me was symbolism."

4. For a month, and only since reading about symbolism, she had noted the development of a habit of "scribbling," "scratching," "drawing pictures and lines" when telephoning, studying, sitting in the classroom, or merely idling. She did this in an abstracted manner, usually without noting what she was doing and thought of it merely as a sign of nervousness, of a desire to do something; what this might be, she did not know. She added that it was a "jittery" habit, objectionable because it "dirtied" the walls of telephone booths, the tablecloths in restaurants and clean paper in her notebooks. (Throughout the interview the patient constantly demonstrated this "habit" most adequately, and it was obvious that she was not aware that she was doing so. Only at the close of the interview did she notice her scribbling and remarked, "Well, I guess I have demonstrated that jitteryness better than I described it.")

5. The only personal problem which troubled her consciously was the fact that her three years at college had slowly and gradually separated her from her most intimate girlhood friend, in spite of that girl's regular weekend visits to the patient's home. The patient felt "lonely" and "resentful" about this, and during the preceding few weeks, this angry feeling had increased until it had become an "uncontrollable resentment" over the loss of her friend. Nor was this obsessive resentment diminished by her realization that there was nothing she could do about it because of the ever increasing divergence of their interests.

At the completion of her story, in the manner so characteristic of psychiatric patients who have told more than they know, she dismissed her account as probably being of no significance and asked insistently whether now, after hearing her story, it still was thought possible to secure by means of automatic writing the facts which were pertinent to her problem—"if there really were a problem." She thought that if she could read subsequently whatever she might write automatically, she could thus force herself to become consciously aware of what was troubling her. She also wanted to know if the examiner was confident that her subconscious could function in a sufficiently integrated fashion to give a coherent, understandable account.

In response to these anxious inquiries, she was told emphatically that she could do exactly as she wished. She was then given repeated carefully worded suggestions in a gentle, insistent and attention-compelling fashion (which served to induce the passively receptive state that marks the initiation of a light hypnotic trance) to the effect that:

1. The time intervening until her appointment on the next day would be spent by her subconscious in reviewing and organizing all the material to which she wished access.

2. In addition, her subconscious would decide upon the method or means of communication. It would select some tangible method by which to communicate what it had to say in a way which would be clearly understandable to the examiner and at the proper moment, be clearly understood by the patient herself, so that no doubts or equivocations would arise.

3. Since she herself had suggested automatic writing, pencils and paper would

be supplied, so that she would have an opportunity to employ that method in the same abstracted manner as that in which she had made her drawings during the interview. The reader will note that this suggestion actually constituted an indirect command to repeat her *drawings* in an intelligible fashion. It was given for the reason that automatic writing is often the most difficult to secure on first attempts.

It was to be expected that this would be even more true with this patient, whose entire story implied a resolute unconscious reluctance to know certain things, despite her strong concomitant conscious desire to become aware of them. For her, therefore, automatic writing itself would have proved too revealing, if successful at all, and would have forced on the patient a too rapid realization of her repressed material. This would either have proved profoundly upsetting or would have summoned up vigorous repressive mechanisms to forestall complete communication.

4. In the interval before her next appointment, she was to keep her mind consciously busy with studying, reading light fiction and social activities, thus supplying herself with innocuous topics for conversation on which she could report consciously. Thus at the time of the appointment, communications concerning her problem would be imparted entirely by subconscious automatic behavior (the drawing) and not become part of her conscious speech.

At the end of the interview, the patient seemed rather confused and uncertain about her instructions. She attempted several times to pick up the sheets of paper on which she had again been "nervously scribbling," suddenly made a last plea for reassurance, and then left quickly when this had been given.

Examination of her drawings after she departed disclosed various figures and lines repeated over and over in varying sizes. There were long and short lines, vertical, horizontal and oblique ones. Some were traced lightly, others heavily shaded. Also, there were spirals, cylinders, triangles, squares and rectangles of various proportions, some drawn lightly and others heavily. While she had been making these drawings, no sequences or relationships had been observed. One peculiarity was the fact that each figure had been drawn as an isolated unit with no attempt to run one into the next (FIG. 1).

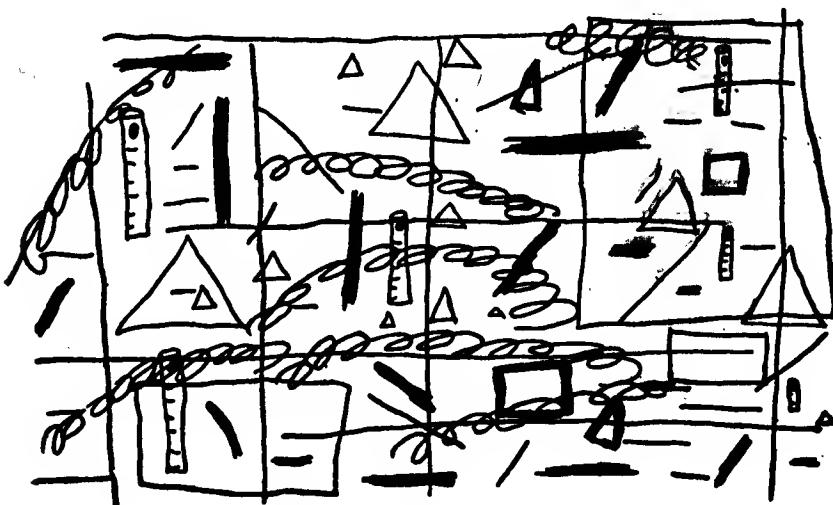


FIG. 1

A subsequent examination of two different books of her lecture notes showed that her "nervous scribbling" had been a sudden development of the preceding weeks. In these notebooks, page after page was found with the same limited types of figures and lines, drawn over and over in a totally disconnected, confused fashion.

The next day, the patient appeared promptly and remarked at once that the suggestions given her the day before seemed to have been effective, since she had not thought about herself at all after leaving the office. She had even lost conscious interest in her problem so completely that she had returned only because she felt herself to be under an obligation to keep her appointment. She also explained that she had read a recent novel and was prepared to relate the entire story in detail, remarking facetiously that it would be a cheap way for the examiner to become posted on the latest information of the literary world.

She was told promptly that she could start the story at once; as she did so, her chair was carefully placed sideways to the desk so that her right arm rested on the desk in close proximity to paper and pencils, while the examiner took a position diagonally opposite. Thus, although she faced away from the paper, it remained well within the range of her peripheral vision.

Shortly after she had begun to tell the story of the book, she abstractedly picked up the pencil and in a laborious, strained fashion began to repeat on the upper half of the sheet of paper the drawings of the previous day, now and then glancing down at her productions for a moment or so in an absent-minded fashion. As before, no particular sequence of the drawings was noted, but a significant duplication of some of the elements may be observed in FIG. 2.

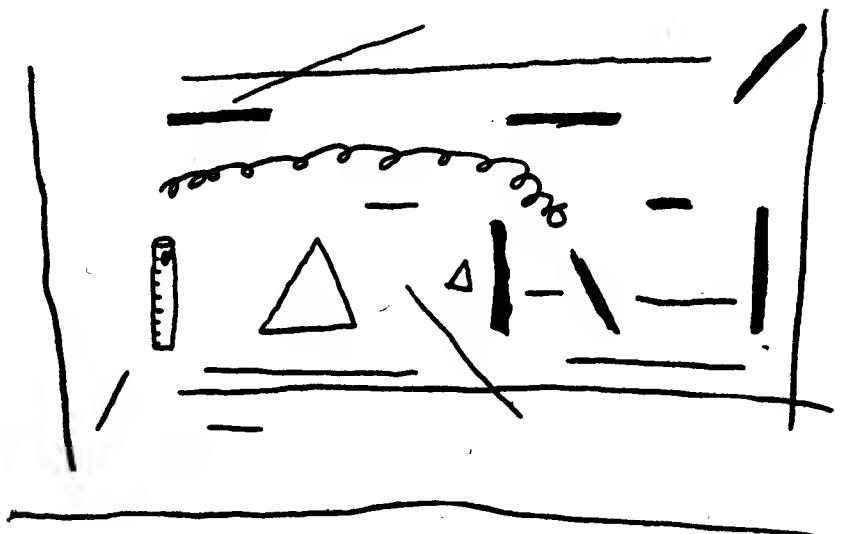


FIG. 2

When she had completed these drawings, she became rather confused in her speech and was observed to relax and tighten her grip on the pencil as if she wanted to lay it down but found herself unable to do so. She was encouraged here by an insistent, low-toned suggestion, "Go ahead, keep on, it's all right, go ahead, go ahead, keep on."

She immediately remarked, "Oh yes, I know where I am, I just lost the thread of the story for a moment," and continued the narrative.

At the same time, her hand was seen to take a fresh grip on the pencil and to shove the pad forward so as to make the lower half of the paper available. She drew a line as if to divide the paper in halves. Then in a slow and deliberate fashion, with a marked increase in the tension of her right hand and some speeding of her speech, she began to construct a picture by arranging the elements which she had previously drawn so often and so repetitively in an incoherent manner into an orderly, systematic whole. It was as if she had first laid out the materials for her construction and was now putting them together. Thus the four heavily shaded lines of equal length became a square, and the other units were fitted together to form the picture shown in FIG. 3.

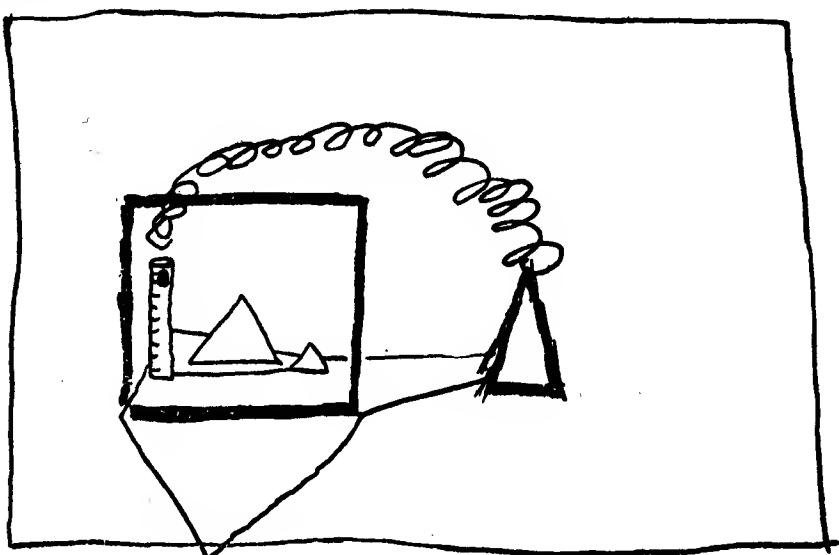


FIG. 3

In completing the square, however, the patient showed marked uncertainty about its lower left-hand corner and kept glancing down at it abstractedly for a moment or so at a time. Finally, she distorted the corner slightly, leaving it open. Also, in making the lower right-hand corner, she pressed down unduly, breaking the pencil point.

In making the diagonal line extending downward from the lower left-hand corner of the square, her hand moved with sudden force and speed. After a considerable pause, her hand moved more and more slowly on the upstroke to the lower right-hand corner of the square, the line wavering; finally her hand moved quickly and forcibly over to the shaded triangle.

Upon drawing the line connecting the small triangle with the heavily shaded triangle, her hand stopped short as it approached the side of the square and placed a period. Following this, her hand lifted and moved over the edge as if surmounting a barrier, after which it completed the line in a steady, firm manner.

The spiral line connecting the cylinder and the shaded triangle began freely and easily, but as it approached the triangle, the hand movements became increasingly labored and slow.

Repeatedly during the drawing process, the patient's hand would return to the

larger of the two light triangles, as if to touch it up a bit and to make it more perfect in outline, while the shaded triangle was drawn roughly.

During her drawing it was possible to record the order in which the various elements were added to the total picture:

1. Square.
2. Cylinder.
3. Large light triangle.
4. Small triangle.
5. Connecting lines between cylinder and large triangle, large triangle and little triangle and cylinder and little triangle.
6. Enclosing rectangle.
7. Heavily shaded triangle.
8. Connecting line between the little triangle and the shaded triangle.
9. The line leading from the cylinder out of the square and beyond the rectangle, then back to the square and thence to the shaded triangle.
10. The spiral line.
11. The central shading of the upper part of the cylinder.

As she completed the picture, she glanced casually at it several times without seeming to see it. This was followed by a noisy dropping of the pencil which attracted her notice. Thereupon, she immediately called attention to her drawing, picking up her pencil as she did so. Then, using her left hand, she tore off the sheet from the pad to examine it more closely, leaving her right hand in a writing position as if waiting for something. Noting this, the examiner inferred a subconscious desire to make a secret comment and accordingly gave the suggestion: "A short, vertical line means 'yes,' a short horizontal line means 'no'."

Misapplying this suggestion, the patient scanned the drawing carefully, declared that she saw no such lines, and asked how they could mean anything.

The question was then asked "Is it all there?" to which she replied, "I suppose so, if there is anything there at all," while her hand, without her awareness, made a "yes" sign.

"Everything?"

"Well, I suppose if anything is there, everything is," and again her hand made the "yes" sign without her awareness.

She scanned the picture carefully for some moments and then rettalked, "Well, it's just silly nonsense, meaningless. Do you mean to say you can make any sense out of the scratching—to use your own words, that it tells everything?"

Apparently in answer to her own question, her hand made another "yes" sign and then dropped the pencil as if the task were now complete. Without waiting for a reply she continued, "It's funny! Even though I know that picture is silly, I know it has meaning because right now I've got an urge to give you something; although I know it's silly, I'm going to give it to you anyway because it's connected with that." Pointing to the shaded triangle, she took from her pocket a packet of matches advertising a local hotel and dropped it on the desk.

She then consulted her watch, declared that she had to leave and seemed to be experiencing a mild panic. After a little urging, she consented to answer a few questions about what the picture might mean. She looked the drawing over and offered the following comments, which she insisted she could not elaborate:

"Two pictures in frames; a large one,"—pointing to the rectangle—"and a small one,"—pointing to the square—"with the corner broken." Pointing to the figures in the square,

she said, "These are all connected and the connections between the little one"—pointing to the small triangle—"and that"—indicating the cylinder—"is a cigarette with smoke. We all smoke in our family, maybe those are father's matches I gave you. But the whole thing makes no sense at all. Only a psychiatrist could see anything in it." With that, she rushed from the office, only to return at once to ask, "When can I see you again?" On being told, "Just as soon as you want to know a bit more, call me" she rushed away. No comments were made on the unitary drawings and she seemed not to notice them.

Three weeks later, she appeared unexpectedly "to report progress." She stated that, evidently, her drawings must have meant something since she had experienced a marked change in her emotions. She was no longer worried or depressed, though at times she felt "an intense dread of something, as if I were going to stumble onto something; I have a feeling that I'm going to find out something dreadful." With much hesitation, she added, "What I really mean is that I have a feeling that I am getting ready to know something I already know, but don't *know* I know. That sounds awfully silly, but it's the only way I can explain it; I am really afraid to find out what it's all about. It's connected with these matches." She handed the examiner a second pack similar to the first. "We (the family) had dinner at the hotel last night, and that's where I got them. I saw another pack on the library table last night, but these are the ones I got."

All the other remarks were casual in character and nothing further was learned. She left rather hurriedly, apparently somewhat uneasy and confused.

Two weeks later, she again appeared unexpectedly, declaring as before that she had come "to report progress." She explained that, in the interim, she had developed an absolute certainty that her drawing was meaningful. "There is a complete story in that picture that anybody can read and I'm getting terribly curious to know what it is."

Here she demanded to see the drawing, and after scrutinizing it closely remarked, "Really, it still looks like a mess of nothing. I just know it's the whole story, too; but why I say that, I don't know. Yet I am sure that my subconscious knows a lot that it don't tell me. I have a feeling that it is just waiting for my conscious mind to prepare itself for a shock and it's just making me darned curious so I won't mind the shock."

Asked when she would know, she replied "Oh, I suppose not long." She then became emotionally disturbed and insisted on changing the topic of conversation.

A week later, she came in to state that she had an engagement to dine with her girlhood friend at the hotel that evening, and that this was causing her much emotional distress. She explained: "I hate to see our friendship broken up just by drifting apart the way we have. And I don't like my attitude toward Jane. You see, Jane's a year younger than I, and she has a boy friend and is pretty much in love with him. She says she thinks I know him but she won't tell me his name or anything about him. I don't like my attitude toward Jane because I'm so jealous that I just hate her intensely; I'd like to pull her hair out. I hate her because I feel as if she had taken my boy friend away from me, but that's silly, because I haven't got a boy friend. I don't want to keep my appointment because I know I'm going to quarrel with her. There really isn't anything to quarrel about, but I know I'll just say one nasty thing after another. I don't want to, but it's going to happen and I can't avoid it. And another thing: after I quarrel with her, I'm going to have a fight with my father. I've been working up to this for a week. I've only had two fights with my father and they were both about my college plans; I don't know what

this fight's going to be about. Probably some little thing like his carelessness in smoking and dropping ashes on the rug at home, probably any little old excuse. I just hope father isn't in when I get home. Can't you say something to me so this all won't happen? But I suppose as long as it's in me, I might as well come out and get it over with. When I made the appointment with Jane, I had a vague idea of what was going to happen; as soon as she accepted, I could see, just as plain as could be, what I've just told you; so I hung up the receiver before I had a chance to cancel my invitation."

More remarks of a similar character and significance were made. All attempts to discuss her drawings or to secure an elucidation of her premonitions failed. She declared that the only things of interest to her at the moment were the "impending battles."

The next day, she dropped in the office to report hurriedly, "I'm in a rush. All I got time for is to tell you it all happened just as I predicted. Jane and I started out visiting nicely, then I got to wise-cracking and began hurting her feelings. I didn't notice that at first and when I did, I just didn't give a damn and I went to town on her in the crudest, nastiest, most subtle fashion I could. I didn't say anything particularly, but it was the way I said it and mocked her. When she cried, I felt a lot better, and although I was ashamed of myself, I didn't feel any sympathy for her. I wound up by telling her that we could agree to disagree, and she could go her way and I'd go my way. Then I went home and father was sitting there reading. I was itching for him to say something, just anything. I was awfully amused at myself, but I figured there wasn't anything I could do about it, so I began smoking and pacing the floor. Finally he told me to sit down and be quiet, and that just set me off. I just yelled at him to shut up, that I could *run around* if I wanted to, and he couldn't say anything to me. It was too late to go out, and if I wanted to *run around*, I had just as much right as he had. I told him he might think he was smart but I was a lot smarter, that I wasn't born yesterday, that I knew what it was all about, and a lot of silly, incoherent, tempory things that I really didn't mean and that didn't make sense. He got disgusted and told me if I couldn't talk sense to shut up and go to bed and sleep it off. So I did. And the funny thing is that when I woke up this morning, I thought of those drawings I did for you; I tried to think about them, but all I could think was first the word "today" and then the word "tomorrow," and finally, I just kept thinking "tomorrow." Does that mean anything to you? It doesn't to me. With this remark, she took her departure.

The next afternoon, she appeared and declared, "After I left you yesterday, I had a funny feeling I had made an appointment with you for today, but I really knew I hadn't. Then this morning, the first thing I thought of was that drawing, and I knew that I could understand it now. I've been thinking about it all day. I remember the whole picture; I can see it in my mind plainly, but it's still meaningless, doesn't mean a thing. Let me look at it."

She was handed the picture. She scrutinized it in a most painstaking fashion, with an expression of intense curiosity on her face; finally sighing and putting it down to remark, "Well, I guess I'm mistaken. It doesn't mean a thing—just a silly picture, after all." Then, suddenly brightening, "But if you will say just a word to start me off, I know I'll understand it."

No heed was given this indirect request and she repeatedly examined the picture only to lay it aside each time in an intensely puzzled fashion.

Finally, she repeated her request for a "starting word" and was countered with

the question, "What word?" To this she replied, "Oh, any word. You know what the picture means, so just say any word that will give me a start. I am really just dying to know what it's all about even though I am a little bit afraid, maybe a lot. But say something, anything."

Her insistent request was acceded to by the remark, "Sometime ago, you told me you were terribly interested in and fascinated by symbolism." As this remark was made, the packet of hotel matches was carefully dropped on the desk.

She seized the drawing and looked at it momentarily, grabbing, at the same time, the packet of matches and throwing it violently on the floor. She then burst into a torrent of vituperation, intermingled with expressions of sympathy for her mother and explanatory details. The following a summary:

"The damned nasty filthy little cheater. And she calls herself my friend. She's having an affair with father. Damn him. Poor mother. She visits mother, damn her, and father acts like a saint around the house, damn him. They go to the hotel, the same hotel father took us to (for dinner). I hated her because she took my father away from me—and mother. That's why I always stole his cigarettes. Even when I had some, I'd sneak into the hall and get some out of his coat pocket. Sometimes I'd take the whole package, sometimes only one or two. If she thinks she's going to break up my home, she's got another thought coming, plenty too. The first time she told me about her boy friend—her boy friend, huh—she lit her cigarette with those matches. I knew then, but I couldn't believe it. And I used to take father's matches away from him and I'd get so goddamn mad when he'd tell me to use my own. I didn't want mother to see those matches, and it didn't make sense then." This was followed by much profanity and repetition of the above remarks which seemed to exhaust her rage, following which she sobbed bitterly. Composing herself, she apologized for her profanity and rage. She then remarked quietly, "I suppose I better explain all this to you. When you said symbolism, I suddenly remembered that Freud said cylinders symbolized men, and triangles, women. I recalled that cigarettes were cylinders and that they could symbolize a penis. Then the whole meaning of the picture just burst into my mind all at once. I guess I just couldn't take it, and that's why I acted like I did. Now I can explain the picture to you."

Pointing to the various elements of the picture, she explained rapidly, "This cigarette is father, and that big triangle is mother—she's short and fat and blonde—and the little triangle is me. I'm blonde too. I'm really taller than mother, but I just feel little to her. You see, those lines all connect us in a family group and the square is the family frame. And that line from father breaks through the family frame and goes down below the social frame, that's the big square, and then it tries to go back to the family and can't, and so it just goes over to Jane. You see, she is a tall, slender brunette. That smoke from father's penis curls around Jane. That line between me and Jane is broken where it comes to the family frame. I've been drawing and drawing these pictures all the time like that (pointing to the unitary drawings at the top of the page) but this is the first time I ever put them together. See where I blackened father's face. It should be. When I gave you those matches, I told you they were connected with Jane, even though I didn't know that was Jane then."

For some minutes, the patient sat quietly and thoughtfully, now and then glancing at the drawing. Finally she remarked, "I know the interpretation of this picture is true, but only because I feel it is true. I have been thinking everything over. There isn't a solitary fact that I know, that could possibly substantiate what I've said. Jane and I have drifted apart, but that doesn't make her father's mistress. Jane does call at the house but always on evenings when father is out, and while she doesn't stay more than three-quarters of an hour, that doesn't mean that that's a blind. Mother can't hide anything and her nature is such that she would know about things before they happen. I know she has no inkling of this. As for the matches, anybody could have hotel matches and my stealing father's cigarettes only proves there's something wrong with me. Well, now that I've discovered this, I'm going to go through with it and clear it up so that I'll have better proof than just my subconscious drawings."

What this proof was to be she refused to state. The rest of the interview was spent by her in outlining a calm, dispassionate, philosophical view and acceptance of the entire situation.

Two days later, she came to the office accompanied by a young woman. As they entered the office the patient said, "This is Jane. I bullied and browbeat her into coming here without giving her any idea of what or why, and her own sense of guilt toward me kept her from refusing. Now I'm going to have my say. Then I'm going to leave her with you so she can talk to you and get a little sense put into her head." Then turning to Jane, "Just about two months ago, you started something which you didn't want me to know about. You thought you were getting by with it, but you weren't. You told me your boy friend was about four years older than you, wanted an affair with you, but that you wouldn't consent. You were just a sweet young girl talking things over with your dearest pal. And all the time you knew, and all the time I was putting two and two together. Finally I went to a psychiatrist and the other day I got the answer. I know your whole sordid, nasty story. Here's a cigarette, light it with *these* matches—they're hotel matches. Now you know just what I'm talking about."

With that she rushed out of the office. As she did so, Jane turned and asked, "Does Ann really know about her father and me?"

Then, without any questioning of any sort, Jane responded to the difficult situation in which she found herself by relating the story of her intrigue with the patient's father, fully confirming every detail given by the patient, adding the information that both she and her lover had been most secretive. They had been confident that they could not even be suspected. On the occasion of Ann's first weekend home from college after the beginning of the affair, she had felt that Ann was most disagreeable and irritable for no good reason, and Ann's father had made the same comment during one of their meetings. She attributed Ann's knowledge of the affair entirely to "intuition."

Following these disclosures, Ann was recalled to the office. As she entered, she eyed Jane closely and remarked, "Well, I did have a faint hope that it wasn't so, but it is, isn't it?" Jane nodded affirmatively to which Ann replied philosophically, "Well, what father does is his own business, and what you do is yours, but you're not visiting at our home any more. You and father can pick another hotel since the family is in the habit of eating at that hotel frequently. I'll just explain your failure to visit at home to mother by saying we quarreled. As for you and me, we're acquaintances, and you can tell father that heaven help both of you if mother ever finds out. And that's that! You can go back to town by one bus and I'll take another. Beat it now because I want to talk to the doctor."

After Jane's departure, the gist of the patient's remarks was that she intended to accept the whole matter in a dispassionate, philosophical manner. She was still tremendously puzzled as to how she had "stumbled on to it." She felt convinced that "it must have been just plain intuition that worked out right. When I first started drawing those little pictures, it made me feel terribly jittery, but I couldn't stop. I was just obsessed by them, but they had no meaning until last Thursday. Now when I look back at it all, the whole thing just seems screwy because I must have known from the beginning, and yet I really didn't know a thing until the other day here. But hereafter, I'm not going to let any subconscious knowledge upset me as frightfully as that did."

The patient was seen casually thereafter on a number of occasions, and satisfactory evidence was obtained of a continuing good adjustment. A few years later, she married very happily. One additional item of information obtained from her was that, on a number of occasions before her upset, she had suspected her father of intrigues with various women but had always dismissed her suspicions as unworthy. These suspicions were confirmed unexpectedly by Jane while discussing with the examiner her intrigue with the patient's father. She volunteered that, over a period of eight years, the father had had a series of affairs, one of which had been broken off only at her insistence.

After the passage of several months, the patient's notebooks were again examined. She remarked, "Oh, I know! I forgot to tell you. I lost that habit just as soon as I found things out. I haven't done a bit of scribbling since then." Inspection of the notebooks verified her statement.

Subsequently, Jane too was seen casually and volunteered the information that the intrigue was continuing, but that she had complied with Ann's injunctions.

DISCUSSION

The Significance of the Illness

It is hardly possible to overestimate the theoretical significance and interest of this case. Only rarely does an opportunity arise to study a severe neurotic storm—in some ways nearly psychotic—under such well-controlled conditions.

A young woman deeply and apparently peacefully devoted to her father and mother suddenly is confronted with the threat of a deep hurt to her mother through her father and her own best friend, and with the acutely painful picture of her father's emotional desertion of the family. This of course is adequate grounds for sorrow and anger. But it was more significant still that she was confronted by these jolting facts not in her conscious perceptions but only in her unconscious; and that, furthermore, her reaction to this unconscious knowledge was not one of simple sorrow and anger, but a far more complex constellation of neurotic and affective symptoms. All of this becomes clear directly from the data of the case, and without any intricate or debatable analytic speculations and interpretations.

Here, then is a test case: Can psychic injuries of which we are not consciously aware be at the heart of major psychopathological states? And how does the reaction of this patient illuminate this problem?

On the weekend of her return home when she first sensed unconsciously the intimacy between her friend and her father, her immediate response was one of troubled and unmotivated irritability—an irritability which never found any focus, but which was displaced incessantly from one trivial object to another. Thereafter, she lapsed into a state of obsessional depression, which seemed to her to be without content or meaning, although it was accompanied by a withdrawal of interest from all of her previous activities and from all previous object relationships. As this depressive mood gathered, her irritability persisted undiminished and still without adequate conscious object. For the first time, however, it began to focus its expression in two symptomatic compulsive acts whose symbolic meaning later became unmistakable. The first of these was a minutely circumscribed kleptomania, i.e., the specific compulsion to steal cigarettes and matches from her father's pockets,

obviously with an angry and punitive preconscious purpose, but which was seen in the automatic drawings to have a much deeper unconscious castrative goal as well. The second was an equally circumscribed, almost encapsulated obsessional drive toward the constant repetition of scribbled drawings of cylinders, triangles, looping spirals and straight lines slanting in all directions (Figure 1).

It is of interest to note that her illness began with episodic emotional flurries, which quickly were followed by an affect which became fixed and obsessional, and that this in turn was supplemented by a group of obsessional acts. The theoretical significance of this sequence of events is a matter into which we cannot go at this point, but the sequence should be borne in mind.

The patient's involuntary and, to her, mysterious irritability deserves another word. It is an exact replica of a type of frantic, shifting, and apparently unmotivated irritability which one sees in children when they are stirred into overwhelming states of unconscious jealousy towards parents and siblings. In this patient, it is possible to observe how the irritability was precipitated when the patient's unconscious was confronted with the love relationship between her father and her friend. Furthermore, it is clear that the irritability reflects her conflict between various roles, as for instance her identification with her mother in the family group, her fantasy of herself in the role of her father's mistress, her jealousy of this mistress, and the resulting conflicts which manifested themselves throughout her upset period between the vengeful, guilty, and protective impulses toward everyone involved in the situation.

It is clear that the unconscious impulses which were driving her strove in many ways for adequate expression and resolution: first in the vengeful gestures (stealing matches and cigarettes), then in the automatic incoherent drawings or scribblings (a so-called "habit" which is later seen to be infused with specific and translatable meanings), and finally in the increasing and obsessive need to find out what it was all about, as manifested in her blind search into psychiatric and analytical literature, her fascination and skepticism about symbolism, and in the appeal for help, still slightly veiled behind her "curiosity about automatic writing."

Surely both the driving and the directing power of unconscious mentation could not be more beautifully illustrated in any laboratory test than it is here. A further example is in the unwitting double meaning in the naively chosen phrase "run around" which the patient used repeatedly in her blind, angry outburst against her father, without realizing consciously its obvious reference to his sexual habits.

And finally, the symbolic representation of complex human relationships by simple, childlike scribbled drawings, which is the most dramatic feature of the story, is so clear as to need no further comment.

Technique

The technical challenges with which this experience confronts us are several. In the first place, it must be admitted quite simply that the most skillful use of orthodox psychoanalytic technique could not possibly have uncovered the repressed awareness of the father's liaison in a mere handful of sessions. Speed in achieving a result is of course not sole criterion of excellence. It may well be that with such rapid therapy, certain vital reconstructive experiences cannot be brought to a patient, whereas they, on the other hand, may be an essential part of the more orthodox analytic approach. But there is nothing in this observation which would

seem to make the two methods mutually exclusive. In some form, they might be supplementary or complementary to one another; and for at least a few of those many patients to whom analysis is not applicable, such an approach as this, if only because of its speed and directness, might be useful.

Furthermore, it must be emphasized that automatic drawing as a method of communication has a close relationship to the psychoanalytic method of free association. Here the patient's undirected drawings were certainly a nonverbal form of free association. That the translation of such drawings into understandable ideas presents grave difficulties must be admitted; but these difficulties are not always greater than those which confront the analyst when he deals with the symbolic material of dreams. On a two-dimensional plane, these drawings are equivalent to the dramatic symbolic representation of instinctual conflicts which Homburger has described in children's three-dimensional play with building blocks.²

Furthermore, as one studies this material, it is impressive to see how ready the unconscious seemed to be to communicate with the examiner by means of this accessory sign language of drawing, while at the same time, the consciously organized part of the personality was busy recounting other matters. It suggests that by using either this or some other method of widening the conscious gap between the conscious and unconscious parts of the psyche, it might be possible to secure communications from the unconscious more simply than can be done when both parts of the personality are using the single vehicle of speech. It suggests that when only one form of communication is used, the struggle between the expressive and repressive forces may be intensified.

The point which we have in mind here is quite simple. Under circumstances of usual analytical procedure, the patient expresses everything—both conscious and unconscious, instinctual drives and anxieties, fears and guilt—often all at the same moment and in the same system of gestures and words. That under such circumstances, his speech and his communications may be difficult to disentangle is not strange. If, however, by some method, one could allow the various aspects of the psyche to express themselves simultaneously with different simple and direct methods of communication, it would be conceivable at least that each part could express itself more clearly and with less internal confusion and resistance. In this instance, it seems to have worked that way; and the shame, guilt, anxiety and rage which prevented the patient from putting into words her unconscious knowledge left her free to express it all in her automatic scribbled drawing; furthermore this throws light on the essential mechanism of literature and art, a discussion of which will have to be reserved for another time.

It must be borne in mind, however, that the repressive forces rendered the drawings wholly chaotic until the influence of the psychiatrist was exerted on this patient in a clear-cut and definite manner, in order to assist her in the expression of her problem. In the first place, looking back it becomes obvious that the patient came seeking a substitute father who would give her permission to know the facts about her real father—a "permissive agent," whose function would be to lessen her guilt and her anxiety and to give her the right to express the rage and the hurt that she felt.

*Homburger, Erik, "Configurations in Play—Clinical Notes," *Psychoanal. Quart.*, 6, 193-214, 1937.

Thus, we see that the first movement towards recovery came as she simultaneously talked and scribbled in the first interview and apparently without any insight. The observer on that occasion gave her a certain direct quiet, but impressive suggestion: that she was to allow her unconscious to deal with her problem instead of her conscious mind. This is an important divergence from psychoanalytic technique with its deliberate drive to force everything into consciousness, because at the same time that the psychiatrist gave the patient permission to face the facts unconsciously, he gave her conscious mind the right to be free from its obsessive preoccupation with the problem. The patient experienced an immediate temporary relief. She felt so "well" the next day that she even thought of not returning for her next appointment. With this ground under her feet, however, at the next session, she went deeper into her problem and emerged with her first moment of conscious panic—a panic that was not at this point accompanied by any insight. Her next emotional change evolved rapidly out of this experience, and soon manifested itself in her ability to express her rage, chagrin and resentment openly in her compulsive outburst against her friend and her father, instead of in symbolic acts alone.

In all of this, the "permissive agent," by his active encouragement and direct suggestions, served to lift the weight of guilt, anxiety and ambivalence from the patient's shoulders. As a new and kindly father, he diverted some of these obstructing feelings from their older goals, thus allowing the eruption of the full awareness of the affair. This important function of the therapist—to dislodge old and rigid superego patterns—is one which unquestionably was executed by this mild suggestion at the first interview between the therapist and the patient.

Naturally, this could not occur without anxiety; but the appearance of this anxiety, replacing the depression and the compulsions which had existed for so long, marked the upturn in the patient's illness.

Conclusion

We are far from drawing any conclusions from this single experience. Such observations must be amplified and repeated many times before it is decided that, as a consequence, any changes in analytic technique are indicated.

It is just to say, however, that without any effort to open up all the buried material of the patient's highly charged oedipal relationships, a direct link was established between conscious and unconscious systems of thought and feeling which surrounded the parental figures, and this by a very simple technique. Furthermore, as a direct consequence, there was almost immediate relief from seriously disturbing neurotic and emotional symptoms.

It is unfortunate that, although we have a clear picture of the patient's neurosis, we have no analytic insight into the character and personality out of which this neurosis developed. This is important because it is conceivable that such a method as this might be applicable for one type of character organization and not for another, even when the two had essentially similar superimposed neuroses. Such studies as these, therefore, should be carried forward in conjunction with psychoanalysis.

Permanent Relief of an Obsessional Phobia by Means of Communication with an Unsuspected Dual Personality*

FOR OVER A YEAR, a 20-year-old college girl, quiet, reserved, and well poised suffered secretly from constantly recurring obsessive fears that the icebox, kitchen, college laboratory and locker doors had been left open. These fears were always accompanied by a compulsive, often uncontrollable, need to examine and re-examine the doors to make certain they were properly closed. She awoke in the night to make repeated trips to the kitchen in order to reassure herself but this failed to resolve her incessant doubts about the doors. An additional but seemingly unrelated symptom was an intense hatred of cats which she considered "horrid, repulsive things." This feeling she attributed to an early experience of watching "an awful cat eating some nice pretty little baby robins." It was learned that she enjoyed making pets of laboratory animals such as white rats and guinea pigs despite obsessive fears that she might fail to close the door of the animal room. At the time, the subject was beginning to have fleeting recurring doubts about many other doors, although not to a troublesome degree.

INDUCTION OF CATALEPSY, HAND LEVITATION AND SUGGESTION OF NAME FOR HYPNOTIC PERSONALITY

WITHOUT ANY CONSCIOUS OR DELIBERATE therapeutic intent on the part of either the student (who will be called "Miss Damon") or the investigator, she volunteered to serve as the subject of some hypnotic experiments for classroom purposes. A trance induced at the first session was characterized by a marked degree of amnesia, ready hand levitation and profound catalepsy; a post-hypnotic suggestion was given that, in the trance state, her name would be "Miss Brown."

PERSISTING FASCINATION WITH LEVITATION AND HORROR OVER CATALEPSY

ON THE FOLLOWING DAY, Miss Damon sat about the investigator's office neglectful of her work, absorbed in inducing hand levitation and arm catalepsy by auto-suggestion. She would observe these combined phenomena briefly and then would cause them both to disappear by further autosuggestions. This was repeated over and over throughout the day in a seemingly compulsive fashion. It was noted that while suggesting to herself either the lifting or the lowering of her hands, she would repeatedly ask such questions as, "Do you see my hand move? How do you explain it? What does it mean? What is happening? Have you ever had such an experience? What psychological and neurological processes are involved? Isn't it funny? Isn't it queer? Isn't it interesting? I'm so curious I'm just fascinated by it."

**Psychoanal. Quart.*, 1939, 8, 471-509. (With Lawrence S. Kubie, M.D.)

Any replies to these comments went unheeded; she seemed unaware of what she was saying.

While inducing *levitation*, her facial expression was one of intense, lively, pleased interest; but as her hand or hands reached the level of her shoulders and she began to develop an apparent catalepsy, her attitude would change markedly. A facial expression would appear which one could characterize only as "dissociated." She seemed to lose contact with her surroundings and became unresponsive to verbal or tactile stimuli. In addition, there appeared a look of intense terror with pallor, dilated pupils, deep, labored, and irregular respiration, a slow irregular pulse, and marked tension and rigidity of her whole body. Soon these manifestations would disappear, quickly to be replaced by the previous look of eager, amused interest; whereupon she would at once begin suggesting to herself a lowering of her hand and a disappearance of the catalepsy.

Later that day, she was asked why she was so interested in catalepsy and levitation but she could give only such rationalizations as were based on her psychological training and interests. She showed no realization that more might be involved except for a joking remark that *her extremely low salary warranted her getting whatever experience she could*.

The next day, the same behavior began anew. After confirming the observations of the previous day, the suggestion was offered that she might like to try more complex coordinated movements. She was at once interested and the suggestion was given that she try automatic writing, to which she agreed eagerly while expressing many doubts about her capacity to do so.

INVESTIGATION THROUGH AUTOMATIC WRITING LEADING TO ATTACK OF ACUTE ANXIETY

AFTER PLACING HER in a suitable position to distract her attention completely from the proceedings, the subject was instructed to read silently an article on gestalt psychology and to prepare a mental summary of it, ignoring as she did so anything that might be said or that might occur.

When she had become absorbed in her reading, hand levitation was suggested. She was then instructed to pick up a pencil and *to write the reason for her interest in hand levitation and in catalepsy*. This last instruction was repeated several times and shortly she began to write without interrupting her reading. Towards the end of the writing, she developed body tremors, marked generalized physical tension, deep labored respiration and pupillary dilation, and her reading seemed to become laborious and difficult. As she completed the writing her face was pale and expressed intense terror. She dropped the pencil and explained that she suddenly felt "terribly afraid;" she wanted to cry, but could not understand why, since there was nothing to distress her in what she had been *reading*.

With these words, her anxiety seemed to disappear completely, to be replaced by an air of eager puzzled interest. She made no further reference to her emotional distress, apparently forgetting it completely. Immediate questions showed that she was able to give an adequate summary of what she had read. Then she was reminded of the task that had been given her. She inquired whether or not she had written anything, and when shown her writing manifested first pleasure and then disappointment. The writing was illegible, scrawling, and even difficult to

recognize as such. She studied it and succeeded in deciphering the first word as "trains," although a careful study of the word and the observation of her pencil movements as she wrote indicated that it was "trance."

She then was asked to repeat the writing under the same conditions as before. Similar results and behavior were obtained except that this time, instead of dropping the pencil, she continued to make writing movements in the air while expressing verbally her feeling of being "awful scared." Again, immediately upon verbalizing her emotional distress, she seemed to forget it and interested herself first in summarizing what she had read and then in attempting to understand her writing. Accordingly, she was asked to decipher what she had written. While she was absorbed in this, low-voiced suggestions were made "to write all the rest which is not yet written on the paper." Apparently without her knowledge, she resumed the automatic writing in lines consisting of single words or short phrases, one of which was followed by an emphatic period. The completed writing is shown in the following illustration:

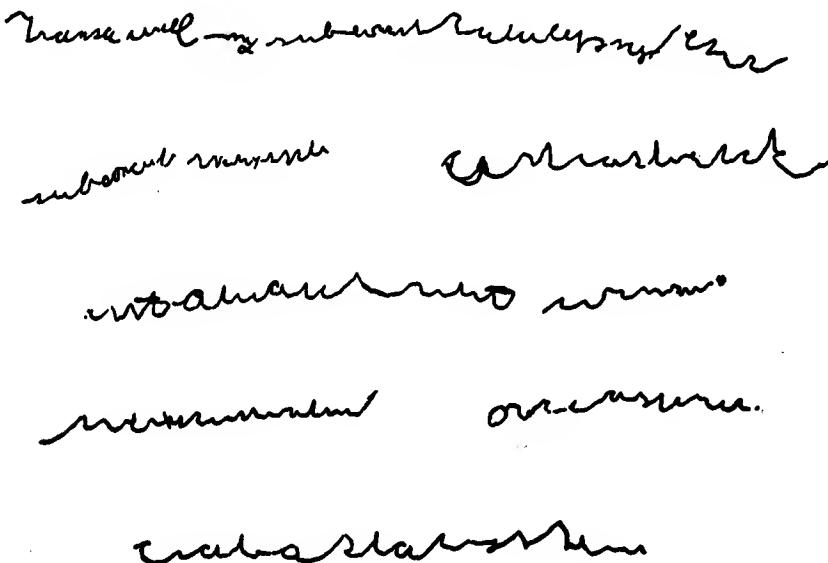


FIG. 1

As she wrote, she seemed to the observer to be breaking her message into fragments, writing a little here, moving her hands to another part of the sheet, writing a bit more, then apparently inserting a part between two previously written phrases. Also there was a tendency for her hand to move back and forth over the completed writing, arousing in the observer the suspicion that she was really counting or checking on what had already been written. Subsequently, this proved to have been what she was doing: she had rewritten parts because of persisting dissatisfaction which led her to make repeated changes. The emphatic period was placed only after her hand had wandered back and forth over the page as if searching for the right phrase. It was found later that she had placed a second period after another phrase.

It was ultimately discovered that the writing constituted a complete production, composed of separate but related elements some of which were partial reduplications and rearrangements of various fragments.

Because of her unusual reaction to hand levitation and catalepsy, the strong effects of which she was only slightly aware, and the peculiar character of her automatic writing and of the concomitant conduct, the assumption was made that the writing represented significant material and that unconsciously she was seeking aid from the investigator. It was decided therefore to pursue the problem further. The investigation was carried on jointly by an assistant who served chiefly as a necessary conversational foil, a secretary who took complete notes of everything said and done, and the subject herself.

Because of the peculiar fashion in which the material was presented—the method of presentation itself constituting a significant part of the problem—no orderly or systematic procedure of investigation could be followed. It was necessary to proceed by trial and error, attempting and abandoning many leads in the effort to decipher the writing.

More than 12 hours of almost continuous work were required to solve the problem and all progress was achieved in isolated fragments. No attempt will be made to tell a strictly chronological story of the work but enough material will be given to show the main steps which led up to the solution of the problem.

THE DISCOVERY OF THE DUAL PERSONALITY

THE FIRST ESSENTIAL STEP was achieved at the beginning of the investigation and was confirmed throughout: the identification of a second and unknown personality in the subject. This discovery was made in the following fashion.

After the subject's hand had completed the last bit of automatic writing and had placed the emphatic period, the investigator quietly slipped the sheet of paper from under her hand leaving a fresh one in its place with her hand still holding the pencil. This was done without attracting her attention. She continued her task of deciphering, finally declaring aloud that she could make out only the words "trance," "will," "my," "catalepsy" and "ever," and expressed much amusement over her inability to read more, asking laughingly, "Did I really write that nonsense?" Both the investigator and his assistant replied affirmatively and in the same amused tone. At the moment, the subject was leaning forward over the desk and her hand was out of range of her peripheral vision. As the verbal reply was given to her question, her hand was observed to write, "No," of which Miss Damon remained unaware. Immediately the investigator asked, as if speaking directly to the subject, "What do you mean?" and while Miss Damon puzzled over what he meant, her hand wrote "Can't." Again speaking as if to Miss Damon, the question was asked, "Why?" to which her hand replied, "Damon doesn't know these things."

There followed a series of questions seemingly directed to the subject, who was merely bewildered and confused because of their unintelligibility to her while her hand wrote appropriate replies. These with their answers will be quoted verbatim to show the definition of this second personality. The quotations continue from the last question and reply cited above. The questions were asked orally, the replies given by automatic writing.

Q: Why?

A: Don't know, afraid to know.

Q: Who?

A: D (Damon).

Q: Who does?
A: Me.
Q: Me?
A: Brown.
Q: Who?
A: Me-Brown-B.
Q: Explain.
A: D is D, B is B.
Q: B know D?
A: Yes.
Q: D know B?
A: No. No.
Q: B part of D?
A: No. B is B; D is D.
Q: Can I talk to B?
A: Are!
Q: Talk to D?
A: Want to (If you want to.)
Q: How long have you been B?
A: Always.
Q: What do you want?
A: Help D.
Q: Why?
A: D afraid.
Q: Do you know what D is afraid of?
A: Yes; D no.
Q: Why?
A: D afraid, forgot, don't want to know.
Q: Think D should?
A: Yes, yes, yes.
Q: You know what it is?
A: Yes.
Q: Why don't you tell D?
A: Can't, can't.
Q: Why?
A: D afraid, afraid.
Q: And you?
A: Afraid a little, not so much.

At this point Miss Damon interrupted to declare her utter bewilderment over the investigator's fragmentary remarks and demanded an explanation.

Q: Shall I tell her?
A: Sure; she don't know.

The secretary then read the questions while her answers were shown to Miss Damon. She attended carefully with a look of increasing understanding, finally remarking, "Why that really must mean I have a dual personality," and then was greatly startled that her hand emphatically wrote "Right." Recovering her poise, Miss Damon asked, "Can I talk to you?" "Sure." "Can you talk to me?" "Yes." "Is your name really Brown?" "Yes." "What is your full name?" "Jane Brown."

Later it was found that *Jane* signified identification with a favorite childhood literary character, and that Jane was really the important name, the *Brown* having evidently been added to it at the time of the first hypnotic demonstration described above.

Miss Damon then reviewed the questions and said musingly, "You want to help me, Brownie?" "Yes, Erickson ask, ask, ask." Further similar questions by Miss Damon elicited variations of the same cryptic answer of "Erickson ask" and a stubborn refusal to elaborate.

Throughout the investigation, the Brown personality was found to be literally a separate, well-organized entity, completely maintaining its own identity, and differentiating to a fine degree between Brown and Damon. Brown was capable of entering into spirited arguments with the investigator, his assistant and with Miss Damon, and of expressing ideas entirely at variance with those of Miss Damon. She could know before Damon did what Damon would say or think and contributed thoughts to Miss Damon in a manner quite as psychotic patients bring up autochthonous thoughts. She would interrupt an attempted explanation of Miss Damon's by writing "Wrong," and would respond to stimuli and cues which Miss Damon either overlooked completely or misunderstood. In fact, she so impressed her personality upon those in the office that automatically she was regarded by the entire group as a distinct personality among them. Nor was Brown limited just to the problems at hand. She would enter readily into conversations on many other topics, often resorting to this in an effort to distract the investigator from his efforts. In addition Brown was possessed of a definite sense of personal pride; on two occasions she resented derogatory remarks Damon made about her and thereupon refused to write anything more except "Won't" until Damon apologized. Brown frequently became impatient and irritable with the investigator because of his inability to comprehend some of her cryptic replies. At such times, she would unhesitatingly and unsparingly denounce him as "dumb."

A characteristic of Brown's automatic script was its economy. A single letter was written whenever possible in place of a word, or a word for a phrase; abbreviations, phonetic spellings, condensations, puns, peculiar twists of meaning, all were employed, at first to a slight degree but to a greater and greater degree as the investigation progressed. Naturally, this rendered the investigator's task correspondingly difficult. It was necessary to discover by appropriate questions that Damon, Brown, and Erickson were all designated by their initials; "help" meant "B wants to help D" or "E should help D;" "W.Y." meant "Will you;" "No" sometimes meant *no* and sometimes *know*, an abbreviation of "Brown does know" or some similar phrase; "subconsement" was the condensation of "sub-itement," "subsequent" and "consequent;" and "Yo" was found to be neither *yes* or *no*, but "I don't know." No written from left to right meant "no", but written from right to left signified a "no" reversed, which is "yes."* In these respects, Brown's language was much like the language of dreams and constitutes a demonstration of the validity of what Freud has written about the use of condensation, elision, reversal of sense, duality of meaning in the language of dreams.

*This is a frequent trick in automatic writing and is one reason why it is not sufficient just to read automatic writing, and why one must watch it as it is being written. Adequate objective records therefore could be made only by use of a motion picture. Brown's explanation of the reverse writing was, "D no (know) question. D read answer. D thinks she understands. E see writing. E no real answer. D don't. That way D not afraid."

Another method of abbreviation was the use of vertical pencil mark to mean "Yes," a horizontal one to mean "No," and an oblique line to mean "I don't know." Also,  signified "First part 'no,'" second part "yes," while  had the opposite meaning. Similarly , ,  signified "First part I don't know,' second part 'yes,' " etc.

In addition to these economies, Brown utilized innumerable cues and signs to communicate her meaning which often were exceedingly complicated and abstruse in character. For example, Brown was asked, "Can we get the information from Damon?" Slowly, hesitatingly, Brown moved her hand about the page as if searching for a place to write, then turned the page over and wrote quickly, "Yes." Since this answer was contradictory to previous replies, the investigator replied, "I don't understand," eliciting the comment, "Dumb." Asked "Why," the answer "Saw" was obtained. Much effort finally made it clear that the investigator had observed that before answering the question, she had reversed the paper which signified that the question too had been reversed. Asked, "Then the question you really answered 'yes' to was what?" "From Brown."

Another cue given repeatedly throughout the investigation was a very short oblique line made at random on the paper which looked as if she had attempted to write but had become blocked in her effort. Later study of Brown's productions disclosed the line to be an accent mark by which Brown was indicating that a word the investigator had thought to identify as "consequent" and which Brown had affirmed to be both the right word and rightly spelled and with equal emphasis the wrong word and wrongly spelled was really the French word *conséquent*. Brown confirmed this guess and when the investigator musingly remarked "Well what do you think of that?" Brown wrote "Dumb."

Other cues were writing on a fresh sheet to signify a shift to a new aspect of the problem; writing over previous writing; widely separating various parts of a single written response; periods placed within a phrase or remote from a phrase; dropping the pencil with the point or the eraser in direct relationship to a word; peculiar contradictory answers to the same question; counting the letters in a word or the words in a sentence and giving different totals upon repetition of the counts; misspellings to direct attention to a word and many others, many of which at first either were overlooked completely or were misunderstood.

Brown's attitude towards the investigation was consistent throughout and was highly significant. She asserted emphatically that she alone knew the content of the writing, that Miss Damon did not know and because of fear could not know; that *Miss Damon needed help which must be given in a way known only to Brown*, and that the investigator's function was primarily the assumption of a very special kind of "responsibility" that permitted Brown to give assistance only in response to direct and specific questions with the reservation that Brown might accept, reject or postpone the questions as she felt best. Brown was found to maintain a highly protective attitude towards Damon, shielding her, demanding special consideration for her, offering encouragement, distracting her attention, deliberately deceiving her, and employing various other protective measures.

Perhaps the best portrayal of Brown's attitude may be found in the following quotations from her answers:

"Writing means a lot, B know it all, D don't, can't, afraid, forgot something a long time ago, D can't remember because she never knew some of it, she just

thought she did but she didn't. B afraid to tell D, D get awful scared, afraid, cry. B don't like D scared, won't let her be scared, won't let her feel bad. B can't tell D, won't tell D. D must know. D must have help. B need help. Erickson ask. Ask right question, B tell Erickson right answer, wrong question, wrong answer. Right question only right question. B just answer, not tell, won't tell because D afraid, awful afraid. Erickson ask, ask, ask. Brown answer, not tell, question answer, not tell, question, answer, that help. B answer but not too fast because D get scared, cry, sick. B tell truth, all truth, Erickson not understand, don't understand because he don't know. B trying to tell—Erickson don't ask right questions. Ask, ask, ask. B can't tell, won't tell. B a little afraid; B only answer. Ask, ask."

Repeated and indirect attempts were made to induce Brown to help frame questions but her reply was always, "Erickson ask, B answer; right question right answer, wrong question wrong answer."

Therefore, the task of the investigator became an active search for information forthcoming only when a question was found which hit the nail precisely on the head and which could be answered with approximately one word. The cues given by Brown seemed designed in part to provoke and compel further aggressive interrogations. In conversations which touched upon any other topic except the immediate problem, Brown was under no such restrictions. In these unrelated conversations, Brown was at liberty to drop innumerable hints and clues, most of which were overlooked by the investigator.

As these various aspects of the two personalities, their attitudes to the questioner and their methods of yielding information gradually became clearer, the task of discovering the meaning of the writing became relatively easier.

As first, the subject was told to write and rewrite her message more and more legibly with each repetition. This was unsuccessful whether the repetitions were of phrases, words, syllables or letters. An attempt to have the message written with synonyms for the words or merely substituting other words, so that the investigator could at least determine how many words were involved, was met by a flat refusal: "Won't."

A fresh approach was then begun and Brown was asked, "Is that sentence correct and complete?" "No." Further extensive questioning finally yielded the cue, "Wrong question." After much futile questioning, it was learned that the writing constituted two sentences and hence the investigator should have said *sentences* rather than *sentence*. These sentences, B replied, were abbreviated in form and the words were either abbreviated or condensed. But B added the reassurance, "All there; B know; B understand; E ask right question; B tell."

Next it was learned that the first sentence contained 7, 8, or 9 words; 7 and 8 were stated emphatically, 9 somewhat dubiously; similarly, B indicated that the second sentence contained 13, 14, or 16 words; 13 and 14 emphatically, 16 dubiously. Making the assumption that some of the words were repeated or that some could be broken up into two words, "Brown" was asked to point to the words as she counted. She replied, "Won't, not yet." To direct questions concerning these possibilities, she replied, "Won't tell." When it was pointed out that her refusal to answer these questions was tantamount to admitting that some of the words were either repeated or could be broken in two, Brown conceded, "Maybe;" whereupon Miss Damon who at the same moment was conversing with the investigator's assistant about a recent book, suddenly stammered, complained of

feeling frightened and then continued her conversation, again appearing to repress all knowledge of her emotional disturbance, just as she had done with the panic which occurred during her first automatic writing.

The implication of Miss Damon's behavior was mentioned to Brown who replied, "Maybe. Not tell too fast yet."

In response to further questioning the words *trance*, *will*, *my*, *catalepsy*, *every* and *ever* were deciphered, confirmed, and placed in order in the sentences as follows:

	Word	Sentence
Trance	1	1
Will	2	1
My	3	1
Catalepsy	10, 11, or 12	1 and 2 counted in one sequence.
Every	8, 9, or 10	1 and 2 counted in one sequence.
Ever	13 or 14	1 and 2 counted in one sequence.

(A fuller explanation of this count must be reserved for the end of the paper.) Further questioning proved fruitless nor could any aid be secured in further deciphering. Brown simply replied "Won't" to all inquiries.

A fresh start was made by attempting to have Miss Damon look at various parts of the writing and give free associations. This was interrupted at once by Brown writing, "No, no," and a complete blocking of Miss Damon's efforts by a failure on her part to understand what was desired. This is an interesting parallel to the behavior of those patients in analysis who listen with earnest attention to repeated explanations of what they are to do, but seem incapable ever of digesting what is told them sufficiently to produce any free associations at all. It was as if Brown protectingly told Damon when she could think safely and similarly had the power to forbid her to think and thus arrest her intellectual processes.

Since Miss Damon knew the Morse code, it was suggested that her habit of drumming with her fingers be employed by Brown to tap out the message. S. O. S. which was obtained repeatedly meant, Brown explained, "E help, ask."

Efforts were then made to identify the words simply as parts of speech or to identify individual letters as such without regard to their positions in sentences or words. To these attempts, confusing, contradictory, and conflicting answers were made which Brown finally summarized as, "Can't; just can't; not right questions." No suggestions could be obtained from her as to how the right questions might be asked.

At this point, Brown was asked if the investigator might continue his attempts to secure individual words and she replied, "Try." Accordingly, Brown was instructed to draw two horizontal lines, one to symbolize the most meaningful word in the message and the other the least meaningful, and to draw them any length she wished, equal or unequal, since the lines themselves would have no meaning.

Brown drew two lines, one about twice the length of the other. In drawing the first line, Brown was seen to pause momentarily at about the middle while the second line was drawn in a single stroke. The investigator took this for a cue and immediately extended his pen as if to point to the first line, but actually in doing so covered up the last half of the line. As this was done, Miss Damon who had been commenting in an amused fashion to the assistant about the investigator's absorption in asking foolish questions, remarked that he was probably too absorbed to no-

tice the unpleasant smell of the cigarette he had carelessly dropped in the ashtray. As the investigator with due apologies extinguished the butt, Brown was seen to push aside the sheet of paper bearing the lines. When asked if the investigator might continue his questioning, Brown replied, "Ask, try." Accordingly, her attention was called to the break in drawing the line and she was asked if this meant a word formed from two words. Despite many variations in the form of the question, no answer was obtained except the statement that the right question had not been asked. Finally, the investigator declared emphatically, "That broken line *does* mean two words in the form of one, doesn't it?" "Yes." "And the word 'smell' has something to do with the first part, hasn't it?" "No." "You mean that it may or may not be unpleasant?" "Yes."

Here, Brown shifted her hand to another part of the sheet while Miss Damon declared that she had suddenly become afraid and wanted to cry. Brown wrote, "Help D" and when this was interpreted to mean "Comfort D." Brown wrote "Right." Miss Damon was immediately drawn by the investigator into a discussion of his activities and developed a lively interest in this until shown the broken line, whereupon she again manifested fright, said she could not understand her "funny feelings" and proceeded to laugh them off.

At once Brown wrote, "Feel better, ask" and then wrote "Con" a syllable she had previously written but declared wrong. Extensive questioning followed in which Miss Damon participated actively, with the words "subconsciously," "subsequent," "consequent," and "consequences" coming out, all of which Brown declared to be both right and wrong. Miss Damon impatiently denounced Brown as "crazy" and "a liar." At this, Brown refused to write anything except "Won't." Finally in response to the question why, Brown replied "Angry." Miss Damon read this, flushed deeply and explained with embarrassment, "Brown wants me to apologize," and in a shamefaced manner said, "I'm sorry, Brown." Inquiry by the investigator elicited the fact that Brown accepted the apology and would now write again. Spontaneously she wrote "E, E, E" as if addressing the investigator directly while Miss Damon conversed humorously with the assistant about the apology and her "misbehavior." The investigator continued with "What" to which Brown replied "Sleep." "Why?" "Interferes." As Brown wrote this last word, Miss Damon was still conversing with the assistant and had not been aware of Brown's writing, but as this word was completed, Miss Damon declared, "Why, Brown is going to punish me." Immediate questioning of Miss Damon showed that she had only the "feeling" that she was to be punished and that she could offer no explanation for it unless it was that her apology was not properly offered. While she was giving this explanation Brown wrote, "E, waiting." Accepting the implied rebuke the investigator hypnotized Miss Damon thus removing her as a source of interference.

Thereupon, more rapid progress was made in relation to the words which had been obtained previously. Brown eliminated the word "subconscious" and declared that "subsequent" was both the right word correctly spelled and the wrong word incorrectly spelled. At this point, Miss Damon awakened in a state of terror, recovered rapidly, and began talking at random on various topics, mentioning among other things that her grandfather was French-Canadian. Shortly after this, Brown wrote "Sleep." The investigator obeyed the command and put Miss Damon in a trance again. Inquiry disclosed that French words were involved and the elusive word might be "subsement" or "consequent" or "something like." While this

information was being obtained, Miss Damon repeatedly awakened and fell asleep again, showing intense terror each time she wakened. Questioned about Miss Damon, Brown explained that nothing could be done to help her, that it was necessary for her to experience these fits of terror but that she would feel better as soon as she had felt all of the terror which was connected with the word under examination. All of this information was volunteered by Brown, the investigator studiously avoiding any leading question. Finally, Miss Damon awakened comfortably, asked what was going on and Brown wrote "Tell". Tentatively, not knowing just what to tell, the investigator pointed to the words obtained. Miss Damon interestingly commented that the problem seemed to be one of correct spelling of French words. As she said this, Brown wrote "Look." This was pointed out to Miss Damon and everybody began to study the words Brown was observed to write impatiently, "Look, look, look." Miss Damon's attention was directed to this and she declared, "Why, she must mean look somewhere else; the dictionary of course!"

Page after page of the dictionary was thumbed over with innumerable conflicting answers from Brown, until Brown impatiently told the investigator "Wrong!" More care in asking questions disclosed that the dictionary had a word like Brown's word and that the dictionary word, while it was the right word and correctly spelled, was still the wrong word because Brown had not spelled her word correctly, "Never learned to spell."

Instructed to write her word, Brown now wrote "subitement," followed by "subsequemment," succeeded by "subsequent." Asked if "subsequent" were right for the message, Brown made no reply but Miss Damon again became intensely terrified and proceeded entirely to forget the last steps of the investigation. Quickly she recovered her poise and took up her remarks as if she had just awakened from a trance.

Brown was asked if she had seen any other word of significance in the dictionary. "Yes." "Your word?" "Yes. Spelled different." Here Miss Damon interrupted to ask the investigator, "What does he (meaning Brown) mean?" This peculiar slip of the tongue was marked by sudden pallor and a rapid forgetting of the question. Brown, asked for the word seen in the dictionary, wrote "Niaise." When Miss Damon declared there was no such word, that she had never heard of such a word, Brown wrote, "D don't no it." Asked if this word in some form were in the automatic writing Brown had written, B answered, "Yes." Asked, "How learned," Brown replied "Grandfather." Questioning disclosed the fact that *at the age of three*, Miss Damon had been lost and that her grandfather had called her "Niaise." (Note Miss Damon's subsequent error in placing this episode at the age of four, as though this discussion had never occurred.)

Brown then objected to further inquiries along this trend, explaining "B afraid, D afraid of B telling." Miss Damon read this with amusement, denied that she had even a remote feeling of fear and declared that she was now getting "terribly interested." B commented as Miss Damon spoke, "D don't no." As Miss Damon read this, she remarked, "Isn't *he* economical?" Immediately the investigator asked, "Brown, what do you think about Damon's last remark? Explain it." Brown wrote, "B is *she*. D says *he* because she means Da—. D don't no Da—. B no Da—". Miss Damon followed this writing with intense interest, asked the secretary if she really had said "he," and then explained that "Da" was really the first two letters of Damon and that the three dashes signified m, o and n. As she completed this

explanation, Brown threw pencils, paper, and books on the floor while Miss Damon gasped and in a horrified manner declared, "Brownie is having a temper tantrum," adding, "And she can't help it either."

No further information could be obtained from either Miss Damon or Brown, until Miss Damon pleadingly asked, "Please Brownie, get the information," to which Brown replied, "Suppose I fail?" In a challenging tone, Miss Damon replied, "Brown, will we ever know?" Slowly Brown wrote, "Yes," while Miss Damon shrank back in her chair, hid her face and began to cry. The investigator asked "When?" "Don't know." Taking a firm, aggressive stand, the investigator declared that too many hours had been spent already, that it was now 4 p.m., that the assistant had an evening appointment, as did likewise the secretary, and that more reliance should be placed upon Erickson. At this moment, the assistant stated that her appointment was for 8. Brown was asked to specify the time at which she would give the complete information. At this point, Miss Damon recovered her poise and interest and expressed delight when Brown wrote 7:30, but when Miss Damon asked Brown to confirm this promise, Brown ignored her, writing, "E, ask, work."*

THE USE OF A MIRROR AS A "CRYSTAL" IN WHICH TO CALL UP VISUAL MEMORIES

ASKED HOW, Brown wrote "Crystal." Miss Damon explained that Brown must want her to do crystal gazing which she considered ridiculous since she did not know how, had only heard about it, and really could not do it. Brown replied, "Waiting."

Accordingly a trance was induced and using a mirror which reflected the ceiling, Miss Damon was instructed, "Brown wants you to look in that crystal and see? Almost as soon as she peered into the mirror, an expression of intense terror came over her face. She awakened sobbing, cowering in her chair, hiding her face declaring that she was "awful, awful afraid," and begging piteously for help. Evidently, the investigator's face reflected his alarm; but before he could say anything, Brown wrote, "It's all right, E. D just scared. Got to be. Then feel better. Just comfort." Tentatively, the investigator made a few general soothing remarks, while Brown wrote "Right" and Miss Damon piteously and tearfully reiterated her remarks, "I'm so scared, just awful scared."

In a short time, Miss Damon recovered her poise and became quite apologetic about her "babyish" behavior. At the same time Brown was writing, "Better now; crystal."

The procedure was repeated with the same results except that this time before awakening, the subject repeatedly looked into the mirror, then away from it, taking a longer look each time and finally trying to say something but awakening to avoid speaking. A similar panic followed lasting about 20 minutes with Brown repeatedly

*Here Brown specified the exact time at which full insight would be achieved. It is often found to be desirable to ask subjects to specify the hour at which they will understand something, urging them not to set this hour at either too immediate or too remote a time. This seems to give them a definite task and goal and to relieve them of the difficulty of making up their minds in the final moment of decision as to when to expect insight. Thus it gives them an ample opportunity to prepare for that insight.

reassuring the investigator that "D soon feel better now," "Everything all right," and "D getting ready to know but she don't no it."

Finally when Miss Damon had composed herself, apologizing for her emotional outburst as before, Brown again wrote, "Crystal."

Another trance was induced and crystal gazing suggested. This time, although markedly agitated, Miss Damon reported in her trance that she was seeing her grandfather and that he was saying a word. As this report was given, Brown wrote "B getting scared, awful scared," at which Miss Damon awoke and calmly and comfortably asked, "What time is it?" although the investigator's watch lay face up on the desk. In answer to her own question, she glanced at the watch and gave the time correctly as 6:35 while Brown at the same moment wrote:

D no everything 7:30
 D tell then-forgot long ago.
 B won't tell.
 B won't let D no till 7:30

At this moment, Miss Damon asked irrelevantly, "Brownie, what is your first name?" and as Brown made no reply, Miss Damon in an agitated, excited, highly emotional fashion said, "He's gone crazy! He! Gosh!" Then quietly in a subdued puzzled way, Miss Damon asked Brown why she had said *he*. Brown answered, "D no soon; not ready yet." When Miss Damon sniffed at this answer, Brown wrote, "D don't believe because afraid." Miss Damon declared that she had been afraid a short time previously but she had no sense of fear at all now, and her air was one of amusement. Brown commented, "D don't no. D wrong. D getting ready, soon ready. 7:30 right time; D have nuff time get ready." Following these remarks, Miss Damon scoffed, declared with amusement that she was ready for anything and that she had no fear. Brown repeated her comments, finally interjecting, "B tell everybody at 7:30. D understand; nobody else."

Suddenly Miss Damon's dispute with Brown changed in character and she became definitely apprehensive. Addressing Miss Damon, the investigator asked what was happening. Brown, startling Miss Damon replied, "First D afraid vague, then afraid to learn something, then afraid she not no; now she afraid she going no. D afraid she going to no it," with the *it* written in heavy characters.

Miss Damon attempted to ridicule this explanation but her general discomfort became increasingly apparent and she began attacking the logic of the various statements, dropping the point and feebly returning to it.

Suddenly, Miss Damon looked at the watch and remarked that it was 7:12. As she spoke, Brown wrote, "7:21" and Miss Damon said excitedly, "Look, she reversed it."

Brown was asked why and her explanation was:

D thinks 7:07 (Damon disputed this).
 E won't (understand).
 E will later.

No further explanation could be elicited.

While Damon puzzled over this material, Brown wrote, "D will begin to remember at 7:23."

Damon: "That's ridiculous. How can she say a thing like that. There's nothing to remember."

Brown: "B changing D mind."

Damon: "She is not, she is not, there is nothing to remember."

Brown: "D don't no. B changing D mind."

Damon: "That is ridiculous. As if I didn't know if my mind was being changed."

Immediately she sobbed very hard but briefly, and then asked timidly "Have I a reason to be scared?"

Brown: "Yes."

Brown to investigator: "D cry, don't mind, nothing help. D feel better."

Miss Damon still crying observed at 7:22:30 that "time is fast," recovered her poise, denied that there was anything to remember or that she was scared that she wouldn't remember, fluctuating from amusement to apprehensiveness.

At 7:27:30, another intense panic developed, Miss Damon showing great terror, sobbing, cowering, declaring piteously that there was nothing to remember.

At 7:30, B wrote slowly, much interrupted by Miss Damon's sobbing, "consequences of catching the muskrat to the little idiot," following which Miss Damon sobbed, shuddered, and cowered, begging piteously for help until 7:35. Exactly at that moment, she recovered her poise and declared with startled interest, "I just remembered a story my grandfather told us when we were kids. A muskrat got into the pantry. Every one chased it and knocked over all the things. I haven't got a thing to do with what my hand is doing."*

The investigator asked, "Well, what does all this mean?"

Brown replied, "D no, E not understand, told you before."

Erickson: "You agreed to give the full message."

Damon interrupting verbally: "Every *subitemet* catalepsy the consequences of catching the muskrat to the little idiot."

Erickson: "That it?"

Brown: "No."

Erickson: "What is it?"

Damon: "Spelling is bothering her; let's let her look in the dictionary."

After many pages had been thumbed, apparently at random, Brown wrote Subséquemment, subséquent, subsequent."

*An explanation of the various times alluded to here is necessary. (1) Brown promised to tell everybody at 7:30. (2) Shortly thereafter Miss Damon mentioned that it was 7:12, while Brown wrote 7:21, at which Miss Damon remarked, "Look, she reversed it". Brown immediately replied, "Damon thinks 7:07". This was promptly disputed by Damon. (3) Brown then remarked "E won't (understand). E will later". This was followed by the statement, "Damon will begin to remember at 7:23." (4) At 7:22:30 Damon remarked, more or less casually, "Time is fast", but at 7:27:30, Damon developed a panic. (5) At 7:30, Brown wrote the significant material, of which Damon remained unaware until exactly 7:35. The explanation of these events is as follows: Miss Damon glanced at a watch which was face up on the desk, and read the time as 7:12. Brown wrote these digits but in doing so reversed the last two digits, thereby directing attention to the minutes. Miss Damon remarked, "Look, she reversed it," at which Brown said, "Damon thinks 7:07," and then promptly declared that the investigator wouldn't understand then but would later on. Now it must be noted that 7:07 is exactly five minutes less than 7:12. Furthermore, the promise was made that at 7:23 Damon would begin to remember; but at almost that time the only thing that occurred was the casual remark that "time is fast". At 7:27:30, however, a panic ensued, apparently five minutes late. At 7:30, actually in accord with the promise "to tell all," the full material was written; but again Damon remained unaware of it until 7:35. When the investigator later asked Brown, "Why didn't you keep your 7:30 promise?" her remark was "Did-my watch." Checking Damon's watch, it was found to exactly five minutes slower than that on the table, and as this was being noted, Brown's hand moved up to point to the 7:07 on the written page. From there it slid over to "E won't. E will later."

Erickson: "The sentence is?"

Brown: "Every subsequent catalepsy consequences of catching the muskrat to the little idiot."

Erickson: "First sentence?"

Brown: "No."

Erickson: "Write first."

Brown: "Trance will my rat antrocine go?"

Miss Damon: "She can't spell, poor thing."

Brown: "Antrosine, osine."

Miss Damon: "Osine, osine, aussi."

Brown: "Aussi."

Erickson: "Two words? First one."

Brown: "Enter."

Erickson: "Rat?"

Brown: "Muskrat."

Erickson: "The real sentences."

Brown: "Trance, will my muskrat enter, also go. Every subsequent catalepsy the consequences of catching the muskrat to the little idiot."

Erickson: "I don't understand."

Brown: "D does."

Miss Damon's explanation: "I know what it means now but I didn't then. It's all right there. Everything, except the words mean so much. Each one means different things. You see, I thought I was interested in catalepsy; it wasn't catalepsy but the rigidity. I was just frightened by the muskrat episode. You see, I was lost when I was four years old (Brown interrupted to write three [cf. above], and Miss Damon accepted the correction explaining that she probably remembered wrong, Brown commenting, "Right") and I was awful scared. *Grandfather scolded me when I got home; he called me "Petite niase"* (Brown wrote *petite niase* and pointed the pencil to the phrase followed by the emphatic period), *and scolded me and said I had left the door open and I hadn't. And I was mad at him and afterwards I would leave doors open to spite him and I got my brother to do it too. Pantry door and icebox door. And grandfather laughed at me for getting lost, and then he told me, while I was still scared, about how he got lost and the muskrat got in the pantry and everything got upset, and I thought I did that. I was so scared I got grandfather's story about him mixed up with my getting lost*". Her Brown wrote, "*Petite niase thinks she is her grandfather.*" "And I was so mad at grandfather, and so scared and I left doors open to spite him and I wondered if another muskrat would come." Again Brown wrote "*Petite niase thinks she is her grandfather.*" This time Miss Damon became aware of the writing, read it, laughed and said, "You remember when I called Brown *he*, and Brown wrote *Da*—? Well, I can explain that. Brown was telling you that I didn't know who I was because my grandfather's name was David. Like my name it begins with Da and has three more letters. And that's what Brown means when she says the little idiot (that word is really spelled *niase*) thinks she is her grandfather.*

*Brown's persistency here is noteworthy. Twice Brown brought Damon back to the story by writing "*Petite niase thinks she is her grandfather,*" apparently in order to compel Damon to keep to this important issue.

Erickson: "Anything else, Miss Damon?"

Damon: "No, that's all."

Brown: "Yes."

Noticing Brown's reply, Damon flushed then asked, "Brownie, has all that got anything to do with doors bothering me?"

Brown: "Yes, tell."

Miss Damon then gave an account of her phobia, speaking of it consistently in the past tense. Following this Miss Damon asked, "Has it anything to do with my not liking cats?"

Brown: "Yes."

Damon: "How?"

Brown: "Cats chase rats."

Damon: "How I have rationalized my hatred of cats. I always thought it was because I saw a cat catch a baby robin, a tame baby robin. But really I didn't like cats because, well *cats like rats*, and I didn't like rats."

Then with an exclamation of delight, Miss Damon said, "Now I know why I always thought there was something wrong with the way I *liked* the white rats in the laboratory. When I played with them I knew I didn't like them but I always persuaded myself I did, and I did like them in an uncomfortable way. (Here Brown wrote, "D liked them so she wouldn't no the truth.") I suppose rats are all right, but I'm not crazy about them any more."

DISCUSSION

THE STORY PRESENTS CHALLENGING PROBLEMS with regard to the workings of unconscious processes and the different technical approaches to them.

In one session, several hours in duration, repressed memories were recovered of a traumatic experience that had occurred at the age of three and had been completely forgotten.

These memories were recovered by the use of automatic writing. The original automatic script was almost unintelligible, only a few letters or syllables being recognizable (cf. illustration). The writing had been accompanied by an intense transient panic. The slow and laborious deciphering of this original script simultaneously solved the mystery of the neurosis itself.

Further use was made of automatic writing as a method of answering questions about the meaning of the original automatic writing. At the end, visual images were evoked by having the subject, while under hypnosis, gaze into a mirror which reflected a blank ceiling.

During the course of these observations, a wholly unsuspected dual personality was uncovered. It is possible that the presence of such a well organized dual personality may be an essential precondition for the successful use of such devices as automatic drawing or writing, mirror gazing, and the like since they would seem to depend upon a rather high degree of hysterical dissociation. It is possible also that the unsuspected presence of just such dual personalities, closely knit and completely segregated from the rest of the personality, may account for certain analytic defeats.

Psychoanalytically, the automatic writing is of particular interest because it makes use of the same condensing and obscuring devices as those which occur

in humor and in the language of dreams. In less extensive observations, this has been noted in the past by Erickson⁴ and the same fact was recently reported with regard to automatic drawing by Erickson and Kubie.⁵ It would seem that, in selected cases, automatic drawing and automatic writing may offer an accessory method of approach to the unconscious, a method, furthermore, which depends upon principles of interpretation which are thoroughly familiar from dream analysis. In special circumstances, these devices may have advantages over more customary technical procedures.

Of further technical interest is the utilization of mirror gazing while under hypnosis. In the interplay between the two main personalities and by means of the questions asked by the investigator and answered in automatic writing by the second personality, much work had already been done to elucidate the meaning of some fragments of the original automatic script. Furthermore, it had become increasingly clear that the content latent behind this script was charged with intense and unbearable terror; but by these procedures alone, it had not been possible to transcribe this unintelligible writing into clear, understandable prose, nor to recover the original experiences which underlay the panic. The preliminary steps seemed rather to establish a situation in which the subject gradually came to feel safe under the guardianship of her protective dual personality and of the investigator. As the subject became sufficiently reassured, she was able to face the sources of her terror and finally could recover the lost memories while gazing into a mirror under hypnosis. It is especially worthy of note that the suggestion that this device be tried was given by the second personality.

The use of hypnotism merits further discussion. Hypnotism is under such a cloud that the debt which psychoanalysis owes to it is often forgotten. Freud's earlier writings are full of allusions to the various phenomena of hypnotism, some of which will be quoted in another connection below. As the years went on however, all reference to the problems with which these phenomena confront us disappeared until the papers on Group Psychology and Analysis of the Ego,⁹ the German edition of which appeared in 1921 and the English translation in 1922. Here, it became evident that the derogatory attitude towards hypnotism which its therapeutic failures and its commercial exploitation had engendered in every serious scientist had turned Freud's thoughts too from its scientific importance, even as an object of analytic study. (See the chapter, *The Group and the Primal Horde*, pp. 95-100.) Yet in spite of his antipathy to the use of hypnotism, on page 100 he says of hypnosis that it "is solidly founded upon a previous position which has survived in the unconscious from the early history of the human family." The implication here is that hypnotic phenomena are universal and must be taken into consideration in all efforts to understand the neuroses. If this is true, then the study of hypnotic methods is a duty of the psychoanalyst, and he must return to that fountainhead of original and dramatic unconscious material from which Freud himself derived his first impetus.

It is interesting furthermore to see that Anna Freud in her recent book, *The Ego and the Mechanisms of Defense*⁶ subscribes to the traditional derogatory judgments against the use of hypnotic methods to elicit unconscious material. There she says (pp. 11-13) that under hypnosis the revelation of the unconscious is achieved by a "total elimination" of the ego which therefore takes

no part in the therapeutic procedure but in the end throws off the influence of the physician and again represses the unconscious material which has been brought to light. She contrasts with this the process of free association under which the ego is induced to "keep silent" only for interrupted fragments of time so that the observer's attention is constantly oscillating between the elicitation of material during the period of ego acquiescence and direct investigation of the activities of the ego itself when it becomes resistant.

It should be obvious that there is no *a priori* reason why hypnotic investigations of the unconscious cannot be carried on in just this way. Nor is there any necessary reason why the analytically informed investigator or therapist who in these days is using hypnotism should forcibly thrust upon his patient the material which has been gained from the unconscious under hypnosis, merely because in a more naive period before anything was understood about the forces of resistance, the traditional hypnotist proceeded in that ruthless fashion. The lessons learned through psychoanalysis can be applied in the use of this allied method, and there is no more reason why hypnotic therapy should consist of an explanation of the patient's symptoms to the patient without regard to the attitude of the patient than that this should be the process of analysis. On the contrary, it is possible in the hypnotic as in the waking state to secure information from the unconscious and then so to motivate the total personality that there will be an increasing interplay of conscious and unconscious aspects of the personality so that the former gradually overcomes the resisting forces and acquires an understanding of the latter. Just as in analysis there can with patience be a full opportunity to delay, postpone, resist, and distort when necessary, and yet through this activity always bring the process nearer to the therapeutic goal.

In fact, this process is well illustrated in the case when for instance during the questioning of Brown, Miss Damon suddenly interrupted saying "Every subitemental catalepsy the consequences of catching the muskrat to the little idiot." This was a sudden and seemingly meaningless eruption of unconscious material into consciousness; yet in it a few important fragments of memory returned. By this "meaningless" verbalization, Miss Damon participated on a conscious level but in a safe and partial fashion; thereby, however, she prepared herself for the more dangerous complete participation that occurred later. Thus, it played a role identical with that of a dream which is only partially remembered and partially interpreted.

It is a clinical fact that the memories brought to light and the emotions discharged in this strange experience permanently relieved this young woman of a serious and rapidly increasing compulsive phobic state. The question may fairly be asked whether the writers are in a position to explain either the origin of the phobia or its resolution. Here perhaps, it is best again to let the facts speak for themselves by reviewing the brief story as far as it is known.

For a short time, a little girl of three believes she is lost and while lost gets into a state of intense terror. She is found again or else finds her way home and is greeted by a grandfather who scolds her, makes her feel guilty of leaving doors open, laughs at her, humiliates her by calling her a little *niaise* (idiot), and finally tries to comfort her by telling her a story of an occasion in his own childhood when he was lost and when a muskrat entered the house through an open door and got into a pantry where it did a great deal of damage. At this, the

little girl is thrown into a state of increased terror, rage, anger, resentment and confusion. She mixes up her grandfather's story and especially the tale of the muskrat with her own experience. She feels as if it had happened to her *almost as though she were her grandfather*. She is angry and out of spite and revenge, she deliberately begins to leave doors open as he had done and as he had unjustly accused her of doing. Then she begins to fear that she will make a mistake, that she will leave doors open unwittingly and that something dreadful will come in. She begins compulsively to check up on the doors over and over again.

Brown's statement was that when Miss Damon was "so scared," her grandfather should have explained fully all about her scare instead of "selfishly" telling her about his being scared too because that meant that Damon's scare was so bad that it scared even grandfather, and besides "it added his scare to hers." Brown stated further that it was Damon who resented this, and Damon who punished grandfather; although Brown confessed, "I helped a little, too. Damon thought of leaving the doors open and Damon did that, but I helped by getting Damon to get her brother to do it." Brown then explained the phobia as a direct consequence of this effort to punish the grandfather: that Damon concluded if she punished grandfather in this way she would be hopelessly caught and unable to stop punishing him. Brown added, "It's just like she still believes that thing about a child crossing its eyes and not getting them uncrossed. That is, she believes it is a certain way even though she knows it isn't true. That's what happened then."

Without attempting to settle the question of whether or not this is an adequate explanation of the phobia, one may feel justified in concluding that the first component of the motivating forces, namely the revenge fantasy against the grandfather, was repressed and that the phobia remained obsessive until this original motive was recovered. From the point of view of analytic therapy, it is particularly interesting to emphasize that the obsessional phobia was relieved merely by the recovery of these specific conditioning events and without any investigation or discharge of underlying patterns of instinctual oedipus relationships, castration anxiety, or the like.

Perhaps most surprising of all is the entirely unanticipated discovery of a dual personality in a young woman who aside from the phobias described above had been living a relatively normal and well adjusted life, and in whom the existence of such an *alter ego* had not even been suspected. Inevitably, this raises the question of how frequent such unrecognized dual personalities may be, either as partial or as complete formations. If they exist, the complications which they must create in transference relationships in formal psychoanalytic therapy are of utmost significance and have never been investigated. The mere possibility that they are more frequent than has been suspected demands the development of methods to test out their frequency and their significance.

One cannot say that the existence of such multiple personalities has not been suspected or mentioned in analytical writing; but its far-reaching significance seems to have been strangely overlooked. Freud and Breuer² state, "that the splitting of consciousness, so striking in the familiar classical cases of double consciousness, exists rudimentarily in every hysteria, and that the tendency to dissociation, and with it the appearance of abnormal states of consciousness which we comprise as "hypnoid" are the basic phenomena of the neuroses." Further, "The

existence of hypnoid states is the basis and determination of hysteria." Later they speak of the varying "facility" which people show towards "hypnoidal dissociation" as having an etiological relationship to the development of neuroses. On pages 174-175. Breuer³ in his discussion of the Theoretical Material, describes a mechanism for his "splitting" that emphasizes its universality. On page 101 of his paper on General Remarks on Hysterical Attacks, 1909,⁷ Freud notes the role of multiple identifications and the fantastic and dramatic playing out of various roles in a hysterical patient. Nor have other observers limited the phenomena to these hysterical structures. Alexander in The Psychoanalysis of the Total Personality,¹ page 55, says: "Therefore, when I describe the superego as a person, and neurotic conflict as a struggle between different persons, I mean it, and regard the description as not just a figurative presentation. . . . Furthermore, in the study of the neuroses there is no lack of such visible manifestations of a divided personality. There are, for example, the true cases of dual personality—quite rare, to be sure. But the compulsion neurosis lacks few of the indubitable manifestations of a dual personality."

In view of these observations, it is somewhat surprising that with all of the emphasis that has been laid on the varying roles of the analyst in the transference situation, so little has been said about the varying role of the patient who may present to the analyst not one personality but many.

This is not the place to discuss the mechanism by which such multiple personalities are established. Perhaps it can be said that no single case has been studied deeply enough to answer this question, despite the dramatic literary descriptions which exist in classical literature. Nor is there as yet sufficient evidence at hand to establish how many degrees of such multiple formations may exist. Another perplexing problem is presented by the relationship of the phenomenon to the process of repression. Clearly in the production of multiple personality, a process must occur in which certain psychological events are rendered unconscious. Is this the same process of repression as that with which we are familiar in the psychopathology of everyday life and in the neuroses? The topographical figure of speech which comes to mind is, that which we ordinarily think of as "repression" is a repression downwards, and that the psychological structure that results is a series of layers one upon another; whereas the "repression" which would result in a multiple personality would be a vertical division of one personality into two more or less complete units like the splitting of a paramecium. Yet obviously such a concept has purely diagrammatic value and may be misleading.

In fact, one must ask whether one is justified in dismissing the possibility that all acts of repression involve the creation of a larval form of a secondary personality. In his only reference to the problem Freud, in his Note on the Unconscious in Psychoanalysis, 1912,⁸ p. 25, refers briefly to the existence of alternating states of separate and independent systems of consciousness. After stressing the fact that they are *alternating* and not coexistent states of consciousness, Freud leaves the issue without discussing how this form of segregation of conscious material differs from that which occurs in ordinary repressions. Here again, it would seem that we face a basic gap in psychoanalytical knowledge, a gap which exists at least partly because we have turned our backs so completely upon material available only through the experimental use of hypnosis. The states

of conscious and unconscious mentation existing in cases of multiple personality *coexist* quite as truly as in simpler repressions.

In the case here under discussion, we are unable to explain the existence of the personality first known as Jane and later as Jane Brown. We are in a position to understand in some measure the function which this dual personality performed, but not how it came into being. The story makes it evident that under the impulse of terror and anger, the young woman had made a very deep and painful identification of herself with her grandfather. Somehow all of her later anxieties and compulsions stemmed from this momentous event. At some time, she built up a protective companionate *alter ego*, Jane, who knew the things that she did not want to know, who was either unable or else forbidden to tell them to anyone but who exercised an almost continuously protective role towards the patient herself. This was evidenced on innumerable occasions during the course of the sessions described in this report, and is in striking contrast to the destructive or malicious alternative personality which has more frequently been described in the literature.¹⁰

The "Sally" type of personality, described by Morton Prince, often seems to glory in a sense of power but by adroit maneuvering can be made to demonstrate this power in the interests of therapy by compelling the other personality to accept unconscious data which it is trying to reject. In the present case, the disagreements between the two personalities, this is, the abuse, the epithets, the supercilious arrogance, the sulking, the apologies, appear to have been sham battles by means of which the one manipulated the other. The evidence for this is given in the following scrawled statement by Brown: "D need help; D not no (know) D need help. B must help D. E must help D. D not no so got to be made to take help. Got to give help when she not no so she take it. D not no right thing to do. D do wrong thing. B no right thing. B can't tell D; B got to make D do right thing the best way B no how." This explanation is typical of many others and shows that this apparent internal warfare was a byproduct of the clumsy efforts of Brown to guide Miss Damon towards an understanding of matters that Brown understood but could not communicate directly.

Even the anger Brown showed against Miss Damon seemed to serve the same purpose of impressing on Damon the seriousness of the whole matter. Similarly, the occasional impatient abuse of the investigator was like the anger of a child who impatiently tells an adult that it has explained everything when the whole matter remains incomprehensible to the adult.

The apparent "impishness" does not seem to be an expression of Brown's real attitude which was one of deadly seriousness and concern, of worry and anxiety which she seemed to mask from herself, from the investigator, and especially from Miss Damon in order to prevent Miss Damon from sensing her anxiety. It was particularly when Miss Damon became alarmed that Brown went off on some irrelevant tangent inducing laughter on the part of the investigator and his assistants. That Brown herself was also afraid is shown in her statement, "E not hurt. E can do it. E not afraid. E won't be afraid. D afraid; B afraid so let E do it."

The ambiguities of the responses, and the insistent demand of Brown for an absolutely right question before she could answer is a characteristic and at the same time a puzzling phenomenon. It was as though she could not tell her story outright, but could only betray it, as we have said, like the schoolboy who

dares not tell on the school bully, but can betray him indirectly if asked the correct question. To this end, much of the seemingly irrelevant material turns out on close inspection to have been highly relevant because it betrayed cues which were evident to Brown but not to the investigator until the whole story was made clear. It was for this reason that the investigator seemed to Brown to be so intolerably stupid.

A detailed study of multiple personalities might shed much new light on the problem of anxiety: how anxiety is distributed between the various personalities, what different forms anxiety may take in each, how this correlates with special traits of each.

The material from this case justifies only a few comments at this time. In the first place, it is clear that the subject herself suffered from two types of fear. There was the initial horror state which overcame her when the hypnotically induced catalepsy reproduced in her the terror originally experienced when she was lost and when her grandfather told her the story of the muskrat. In her catalepsy, this old fear recurred as a state of paralyzing panic without phobic distortions or projections but with characteristic bodily immobility. Against this, she originally defended herself by a partial dissociation and an attempt identification with her grandfather. This however had served only to plunge her into deeper waters when the grandfather told the story of his own fears. The relationship of this type of experience to the formation of the second personality is something about which we are in a position only to speculate.

The second type of fear from which Miss Damon suffered occurred whenever disturbing unconscious material suddenly threatened to break through the barriers into conscious expression. She dramatized this type of fear more freely than the other, with obvious vasomotor disturbances and with evidences of shame and embarrassment as well as of fear, its demonstration in the interplay between the two personalities was particularly clear.

The protecting Brown was also not immune to fear. She showed momentary anxiety about looking too closely at the visual images that were called up in the mirror. She was afraid she would see something too horrible to endure. Frequently, she made use of euphemism, ambiguities, and circumlocutions of all sorts to escape dealing directly with a frightening topic. She seemed to know that the investigator could name the "awful thing" without experiencing a dread similar to her own. Thus she said, "E not hurt. E can do it. E not afraid. E won't be afraid. D afraid. B afraid. So let E do it." It is not easy to say how much of Brown's fear was for her own safety and how much for Miss Damon's.

A word of further explanation is necessary to clarify the peculiar and confusing way in which the subject first counted out the positions of the words in the sentences. After the sentences were fully deciphered, it was possible completely to explain the counts:

Erickson: "The real sentences?"

Brown: "Trance, will my muskrat enter, also go. Every subsequent catalepsy the consequences of catching the muskrat to the little idiot."

Word	Position	Sentence
Trance	1	1
Will	2	1
My	3	1
Catalepsy	10	1 and 2 together.

Catalepsy	11	1 and 2 together, if "muskrat" is counted as 2 words.
Catalepsy	12	1 and 2 together, if "also" and "muskrat" are each counted as 2 words.
Every	8	1 and 2 together.
Every	9	1 and 2 together, if "muskrat" is counted as 2 words.
Every	10	1 and 2 together, if "also" and "muskrat" are each counted as 2 words.
Ever	13	After the following sequence: "Trance, will, my, muskrat, musk, rat, enter, also, all, so, go, every, ever."
Ever	14	After the following sequence: "Trance, will, my, muskrat, musk, rat, enter, also, all, so, go, every, eve, ever."

"Catalepsy" could have been given different positions, but the subject later explained that it had not occurred to her to split and reduplicate the words in this way until after she had reached the word "ever;" and then it was too late to go back to the word "catalepsy."

This fragmentation of automatic words and sentences is strictly comparable to the fragmentation of the automatic drawings described in the recent paper of Erickson and Kubie;⁵ the words instead of being counted as parts of a sentence are counted purely as syllabic units with only a numerical relation to one another. The task of resolving this deliberately misleading system of counting was tremendously difficult.

SUMMARY

THIS IS THE STORY of a young woman who for a great many years had hidden phobic and compulsive impulses so discreetly that they had escaped the attention even of those who had known her well. When by apparent chance, she volunteered to be the subject for a demonstration of hypnotism, she found herself caught up in a swift stream of events which led in a few hours to the permanent elimination of her phobias and compulsions.

First, she became fascinated by the phenomenon of induced hand levitation, and horrified to the verge of dissociation over induced catalepsy. Thereupon, by means of automatic writing, an effort was made to investigate the reasons for this extreme horror and fascination. This led at first to a series of acute anxiety states, and then to the uncovering of a wholly unsuspected dual personality, a personality which was linked with a childhood heroine from the literature of her youth. In a session lasting several hours, repeated unsuccessful efforts were made to decipher the automatic writing that had been recorded by this second personality. Finally, visual images were evoked by having the subject gaze into a mirror while under deep hypnosis. These images brought back to consciousness some episodes from the third year of the patient's life which clarified the writing and at the same time explained the phobias and compulsions, all of which served to effect a therapeutic result that has persisted over a period of years.

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Therapy of a Psychosomatic Headache*

TOO OFTEN, TRITE OBSERVATIONS are made to disparage experimental findings. For example, a professor of internal medicine after reading a psychiatric report upon a single patient remarked that one case proves nothing. Reply was made that a single instance of an untried medication administered to only one patient with lethal results proved much more than could possibly be desired. The nature and character of a single finding can often be more informative and valuable than a voluminous aggregate of data whose meaning is dependent upon statistical manipulation. Particularly is this true in the field of human personality where, although each individual is unique in all of his experiential life, single instances often illustrate clearly and vividly aspects and facets of general configurations, trends and patterns. Rather than proof of specific ideas, an illustration or portrayal of possibilities is often the proper goal of experimental work.

In a comparable fashion, another type of assumption places limitations unwarrantedly upon experimental findings. For example, many psychotherapists regard as almost axiomatic that therapy is contingent upon making the unconscious conscious. When thought is given to the unmeasurable role that the unconscious plays in the total experimental life of a person from infancy on, whether awake or asleep, there can be little expectation of doing more than making some small parts of it conscious. Furthermore, the unconscious as such, not as transformed into the conscious, constitutes an essential part of psychological functioning. Hence, it seems more reasonable to assume that a legitimate goal in therapy lies in promoting an integrated functioning in complementary and supplementary relationships (as occurs daily in well-adjusted living) in contrast to the inadequate, disordered and contradictory manifestations of neurotic behavior.

THE PATIENT

TO ILLUSTRATE THE ABOVE CONSIDERATIONS, the following case history is reported.

A professionally trained female employee of a state hospital was referred to the writer for therapy after extensive medical study. Her complaint was one of severe headaches for which numerous medical studies had found no physical basis and severe personality disturbances manifested in quarrelsome ness and uncooperativeness. At the time she was seen, she had been given notice of her discharge to take effect either immediately or, if she sought therapy from the writer, in six weeks' time.

Under these adverse circumstances, the patient sought out the writer, explained the situation bitterly, and declared that she was confronted with "The choice of wiring home for transportation money or being messed around with by a damn hypnotist." (The fact that the writer was wholly innocent of any responsibility for her situation was totally disregarded by her.) She added ungraciously, "So here I am. What do you want? Go ahead."

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An effort was made to secure her history but she was uncommunicative and remained so throughout the course of therapy. The only material obtained was the following: For the past four years, beginning when she parted ties with her childhood home, she had been suffering from intense, unlocalized headaches. These sometimes occurred twice a week, were accompanied by nausea, vomiting and physical incapacitation from two to four hours' duration. They were always associated with intense, inexplicable emotional disturbances characterized by extreme quarrelsomeness, bitterness and violent verbal attacks on everyone about her. Usually, these emotional disturbances presaged the headaches, and upon recovery from that symptom, she would remain seclusive, subdued and somewhat socially adjusted for a day or two until the next attack. This had caused her to lose one position after another, all of her friends and even the possibility of making new friends. Hence, she felt most lonely and wretched about her situation. Every attempt to secure more adequate information from her failed. She resented any questions or even casual conversation about herself. She was embittered by the fact that she had been given notice of her impending discharge and only then had been referred for psychotherapy, "as if to make up for firing me."

THERAPEUTIC PROCEDURE

SHE WAS UNFRIENDLY and uncooperative at the first interview and so was told only that hypnosis might possibly be of value but that it would first be necessary to see her during one of her headaches.

A few days later, word was received that she was confined to bed with a sudden headache. She was pale and drawn in appearance, flinched whenever she moved her head or body, and was dazed, slow and unresponsive in her general behavior. A few hours later, she was found recovered from her headaches, spasmotic and excitable in her movements. She spoke in a high-pitched tone of voice, scolded and excoriated everybody and seemed to take a sadistic delight in making cutting, painful remarks. She was most unwilling to discuss her condition, denounced the hypnotist and demanded to be left alone. The next day her characteristic depressive reaction set in; she was silent, seclusive, and occasionally made self-condemnatory remarks.

A few days later, in a pleasant, affable mood, she approached the hypnotist spontaneously for therapy. However, she dismissed all attempts at questioning, declaring politely but emphatically that her only problem was headaches and that all therapy should be directed entirely to that one symptom. If this were done, she explained, her other difficulties would vanish, since they all derived from the headaches and her reactions to them. Finally, it became necessary to accept her on her own terms, with the mental reservation to resort to experimental measures.

Repeated attempts at hypnosis produced only light trances but these were capitalized upon to secure her cooperation as a demonstration subject for a teaching clinic. By this measure, it was possible to induce a profound trance in which she was given adequate training and instruction to permit the induction of deep trances in the future.

During the course of the next four weeks, fifteen deep trances were induced. These trances were utilized to give repeatedly, emphatically, and insistently the

following suggestions until, more or less under duress, she accepted them and agreed to obey them:

1. Should a headache develop unexpectedly, or should she develop the irritability that experience had taught her presaged a headache, she was to go to bed at once and sleep soundly for at least half an hour. This, she was told repeatedly, would serve to abort either of the manifestations.

2. Following this half hour of sleep, she was then to spend at least an hour, preferably more, in mentally reviling, denouncing, condemning and criticizing anybody and everybody she wished, giving free rein to her fantasies as she did so. This was to be done at first in obedience to the instructions given her, but sooner or later she was to carry out these instructions solely because of her own sadistic desires.

3. She was further told that, after she had secured adequate emotional satisfaction from these fantasied aggressions, she was to sleep soundly and restfully another half hour. Then she might awaken and go about her work freely and comfortably with no need to "hate herself." This would be possible, it was explained, because obedience to the foregoing instructions would result in a hypnotic sleep that would persist until she finally awakened to go about her work in a rested, comfortable fashion. Of all this, she would know only that she had gone to bed, fallen asleep, and had finally awakened feeling comfortable and rested in every way.

During the first three weeks, the subject obeyed these instructions a half dozen times by excusing herself from her work, returning to her room and falling asleep. She would remain in this sleep from two to three hours and then rouse up and seem refreshed and comfortable. Several check-ups during periods when she was "sleeping" disclosed her to be in a trance state, but not in good rapport with the writer.

During the fourth week, a new procedure was introduced. This was also in the form of a post-hypnotic suggestion to the effect that on a certain day, at a specified hour, she was to develop a severe headache. As this developed, she was to fight against it and to persist in working until she could no longer stand it. Then she was to go hastily to her room and obey the first series of suggestions.

These instructions were carried out fully. At 1 p.m. on that day, three hours after her headache had begun, she returned to work adjusted socially in a satisfactory fashion. Her only complaint was a comment on her ravenous hunger, since she had missed her lunch. On previous occasions, such an event had often been seized upon to justify her irritability. Thus, she had been given experiential proof of the effectiveness of hypnotic suggestion and of the possibility of a good therapeutic response.

About a week later, in another trance state, she was given post-hypnotic instructions to develop at a given time the emotional disturbance that often presaged a headache. As this developed she was to resist it, to control her tongue except for a few disagreeable remarks, and finally to develop an overwhelming desire to return to her room, to which she would finally yield. There she was to follow the routine suggested previously.

All instructions were obeyed and after nearly three hours of sleep, she returned to her work in a pleasant frame of mind.

These two special trance sessions were purposely included in the course of therapeutic or instructive trances as a measure of forcing the subject to act responsively upon the earlier trance instructions. Subsequent trance states in which the sugges-

tions cited above were given were augmented in force by reference to the experiential values of the post-hypnotically induced headache and emotional disturbances, and the benefits of following instructions. In addition, every effort was made to impress upon her the future effectiveness of the general procedure and the desirability of yielding at once to the post-hypnotic suggestions.

The last trance session was devoted to a general review of the instructions given to her, the post-hypnotic disturbances suggested, her learned ability to meet the whole general problem, and the future applicability of the procedure in the event of further headaches and emotional disturbances. Repeatedly during trance sessions, efforts were made to learn the content of her thinking during the periods of mental aggression, but she proved uncommunicative. It was, she declared, "too terrible" to relate.

Questioning in the waking state disclosed her to have a complete amnesia for all except the superficial facts that she had been hypnotized repeatedly and that there had been a number of occasions on which she felt a headache developing, and that this had been warded off by a compulsive need to sleep. Every effort to secure additional data from her failed. She did attribute her change in behavior to the hypnosis, but was not curious about what had been done.

RESULTS

AFTER LEAVING THE HOSPITAL, she was not seen for three months. At the next meeting with her, she related that she had only two threatened headaches, but had promptly warded them off with a little sleep, and that they had been the happiest three months of her life. She began to thank the writer effusively, declaring that her freedom from headaches was unquestionably the result of his hypnotic work. Efforts to secure her reasons for this conclusion elicited only more expressions of certainty, conviction and gratitude but with no evidence of any true understanding or knowledge of what had occurred therapeutically. She was interrupted in her thanks and the suggestion was given insistently that adequate expression of gratitude could come only from continued satisfactory adjustment in the future. With this remark, the interview was closed.

More than 15 years have elapsed and the therapeutic outcome has been good. She secured a position in another part of the country and has been promoted progressively until she is now a departmental head. Each Christmas, a greeting card expressing briefly her gratitude is received. Occasionally, she sends a business letter asking for references concerning somebody the writer knows, or recommending to him someone needing therapy or a job placement. One additional fact is that acquaintance has been made with several persons who have worked for her. They have been found to entertain the highest regard, personal liking and respect for her and to be most enthusiastic about her charming personality. In response to a specific letter of inquiry, she stated that she had on the average three headaches a year, but that these responded readily to brief rest. She expressed the belief that these headaches were "different" from her former headaches and attributed them to reading without her glasses.

She is now in her early 40's, unmarried, wholly content, absorbed in her work and the creature comforts of her tastefully decorated apartment. She was described by a competent psychiatrist who knew her well (but nothing of the above history) as

follows, "She's just one of those delightful people you like to number among your friends. She looks upon men as charming companions but nothing more. She's most enthusiastic about her work and inspires everyone who works under her. After the day is over, she likes her home, or the theater, or concerts, or has some of us in for a social evening. She is content and happy. You must have enjoyed knowing her."

COMMENT

A definitive discussion of even a single aspect of this case history is impossible since it is restricted entirely to overt symptoms. The only things known are what the therapist tried to do, but not the experiential significances thereof to the patient, and the subsequent definitely successful therapeutic results.

At most it can be said that an experimental procedure was employed which in some manner permitted the patient's unconscious—distorted and disorganized in its functioning—to achieve a satisfactory role in her total experiential life, and to do so without becoming a part of her conscious mind. That such an outcome was possible with one patient suggests strongly that a comparable procedure could be adapted satisfactorily to the therapeutic needs of other patients.

Pseudo-Orientation in Time as a Hypnotherapeutic Procedure*

IN EVERY ATTEMPT AT PSYCHOTHERAPY, there is always the need to utilize the common experiences and understandings that permeate the pattern of daily living, and to adapt such utilization to the unique needs of the individual patient. Hence, to a significant degree, psychotherapy must necessarily be experimental in character since there can be no foreknowledge of the procedures exactly applicable to any one patient. Furthermore, the entire field of psychotherapy is still in the course of early development, thereby enhancing the need for continued experimental studies.

The following case histories are reported to illustrate an experimental therapeutic technique employed by this writer from time to time for the past 15 years. This technique was formulated by a utilization of the general appreciation that practice leads to perfection, that action once initiated tends to continue and that deeds are the offspring of hope and expectancy. These ideas are utilized to create a therapy situation in which the patient can respond effectively psychologically to desired therapeutic goals *as actualities already achieved*.

This is done by employing hypnosis and using, conversely to age regression, a technique of orientation into the future. Thus the patient is enabled to achieve a detached, dissociated, objective and yet subjective view of what he believes at the moment he has already accomplished, without awareness that those accomplishments are the expression in fantasy of his hopes and desires.

PATIENT A

THE FIRST OF THESE CASE HISTORIES is that of a 30-year-old divorced man who held a minor clerical position, lived in a wretched rooming house, and had no friends of either sex. He did no reading, did not attend church or the theater, ate all his meals in one cheap restaurant and limited his recreation to aimless driving about the countryside.

For three years, he had been under the care of a general practitioner because of innumerable somatic complaints involving all parts of his body. At one time, he had been hospitalized as a possible candidate for abdominal surgery. He had reacted traumatically to his admission to the surgical ward by developing extreme terror, sobbing, screaming and complaining of agonizing abdominal pain. An exploratory laparotomy disclosed no pathological condition, but a routine appendectomy was performed. His convalescence was prolonged for a month and marked by even more complaints than he had expressed previously. Additionally, he was periodically depressed, cried a great deal, and was most reluctant to leave the hospital. The operation and his related behavior convinced him that he was a "coward," was "no good," "worthless" and "incapable of being a man."

Thereafter, he had functioned at an even lower level personally and economically.

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He visited his physician two to four times a week plaintively seeking help for his weakness, backache, headaches, gastric pains, etc.

Efforts to refer him to psychiatrists proved futile. They "did not understand" him. In turn, the psychiatrists variously reported him as a "character defect," an "inadequate personality," a "profound hypochondriac," and a "psychopathic personality of the constitutional inferior type." All agreed that he was not amenable to therapy. However, the writer's clinical impression was much more favorable.

Approximately 18 months after his laparotomy, he was referred to the writer for hypnotherapy, and the extensive case history which his physician had taken was made available.

Rapport was easily established with the patient. He was pitifully eager to be hypnotized and proved to be a remarkably fine subject.

For a month, he was seen weekly for a 3-4 hour session. During this time, all efforts were devoted to training him to develop readily every hypnotic phenomenon of which he was capable.

For all of these sessions, a profound amnesia was induced. No therapy was attempted other than establishment of good rapport and a general feeling of trust and confidence.

The next two sessions were spent having him hallucinate a whole series of crystal balls. (The idea of crystal balls lends itself readily to popular understanding, and hallucinated crystal balls are convenient, easily manipulated, and remarkably economical.) In them, he was induced to see a great array of the outstanding emotional and traumatic experiences of his life. These hallucinated portrayals were "fixed," that is, he could look from one scene to another and back again without having to rehallucinate. He could see himself depicted in various situations and at different times in his life. Thereby, he could observe his behavior and reactions, make comparisons and contrasts, and note the thread of continuity in his reaction patterns from one age level to the next.

A most extensive and elaborate series of events were thus viewed by the patient. His reaction to the total experience was one of hopeless resignation. "Anybody that has had all that happen to him ain't got much chance." Even after being awakened with an amnesia for each session, his mood was one of discouragement and general depression.

The next session was spent by having him discuss in the waking state all the things he wished for himself, the hopes he had, and all the ideas he had of what might be possible for him. This session was not satisfactory since much of the time was spent emphasizing his complaints as insuperable barriers to anything he could want. At the close of the session he was most discouraged.

At the next interview, he was hypnotized deeply and instructed to repeat the task of the preceding session. His wistful, plaintive hopes for the future can be summarized as follows:

1. The enjoyment of "just fair" physical health.
2. An economic adjustment "about average."
3. Personal adjustment sufficient so that he could "get along" in relation to recreation, personal habits, social activities, and personal interests and friendships.
4. "Not too much" fear, anxiety and feelings of compulsion.
5. "Enough guts to be a man" if he ever had to have an operation, or, if he had to defend his rights, "to take a licking like a man."

6. A desire to be able to "take in my stride a little better" all the bad things that had happened to him or might happen in the future.

7. A wish that he could achieve "maybe enough" emotional maturity so that he could marry for love and not "because someone pitied me."

He was awakened with an amnesia and departed in a generally depressed mood.

In the two preceding sessions, as in the previous ones, no effort was made to do more than to elicit his responses.

At the next session, with the patient in the waking state, a vague general discussion was elaborately offered of what he could expect in the future. This, it was explained, would be the opportunity to look back over the past, to review his complaints and difficulties and to recall the developments of therapy. Then, most importantly, he could examine all those accomplishments resulting from therapy that represented his achievement of those things signifying normal adjustments. However, this latter could be done only after a lapse of time, probably several months, following the termination of therapy.

He was then hypnotized deeply and the same discussion was repeated in similar general terms.

Still in the deep somnambulistic trance, he was then disoriented for time and oriented or projected in time to some future date.

Essentially, this is a simple though detailed technique of suggestions by which the deeply hypnotized subject is reminded of the current date; told that the seconds, minutes and hours are passing; that tomorrow is approaching, is here, and now is yesterday; and that as the days pass, this week will soon be over and then all too soon next month will be this month. Particular attention must be given, in using this technique, to be most accurate in verbalizing the transition from the future to the present to the past, and to do it easily and gradually without rushing the subject.

The date for the patient, as a consequence of preceding waking and trance discussions, would necessarily be several months in the future. Such future dates are best selected by the subject since the hypnotist might choose one inauspicious for the situation. Also, the selected period of time should not be too exactly defined. For example, if an actual future date, such as the next birthday is desired, the orientation should be to "some days before your next birthday." Then it becomes a simple matter to let the subject define the date progressively more exactly.

When the actual future date is unknown, having the subject glance out of the window and describe what he sees may indirectly reveal the time of day, the season of the year and the location. Thus, one subject described the noonday Christmas shopping rush in a distant city.

The projection into the future that this patient achieved was approximately five months and the setting was an office visit. The purpose of his visit (*since*, for him, enough time had elapsed *since* terminating therapy,) was to give an account of what had really happened *since* then.

The suggestion was offered, to which he readily assented, that he might like to begin with a brief but comprehensive review of the past as depicted in crystal ball scenes. Some ten minutes were spent by the patient in this hallucinatory review. During it, his emotional manifestations were those of sympathetic interest

rather than the intense fear, anxiety and concern he had frequently shown in previous similar situations.

Then the suggestion was made that he might be aided in giving his report on the therapeutic developments he had achieved by visualizing the significant incidents in another series of crystal balls. Thus, he could enjoy watching the progressive unfolding of each event as it had occurred.

He agreed enthusiastically, and as he viewed the various hallucinatory scenes in the crystal balls, his enthusiasm and pleasure increased. Frequently he would either comment excitedly or demand that the writer observe what was happening.

Some of the reports he gave may be summarized briefly as follows:

1. I'm walking down the street. I'm turning. I'm going to see Dr. X (his physician). No, I'm walking past. I'm thinking, "Thank God, I don't have to go there again."

2. I'm swimming and —watch me, I'm going to do a high dive.

3. Look, I'm asking the boss for a raise. He's going to give it to me. Damn it, I couldn't hear how much. I don't understand that. (His attention was hastily distracted. Constant alertness must be exercised to prevent any undue thinking that might break down the established psychological orientation.)

4. My goodness! Did you see that? That was that great big lug who always parked his car just to be mean so I couldn't get my car out until he came out half an hour later. No I'm telling him off and thinking what a sap I was to keep parking my car where he could pull that dirty trick.

5. I'm in the theater. (He was asked what the picture was.) Who's looking at the picture? I'm necking my girl.

6. That's a different girl and I'm taking her to the art gallery and then we are going out to dinner. She's pretty.

7. I'm giving a speech to a group of men. I wonder which one that is, because I gave another speech, too, but I can't see plainly.

8. My car has been painted and I got a new suit. Looks good. I even wear it to work.

He was unwilling to discontinue his crystal gazing, expressing much pleasure in his accomplishments and a desire to describe more of them.

However, he was then reoriented to the current time and given extensive post-hypnotic instructions to have a complete amnesia for every possible thing that might have occurred during the session. Additionally, he was to make no response of any kind to any of the things that might have happened during the session except a full obedience to the instructions just given.

He took his departure, complaining of extreme fatigue.

He was seen the next day and the same routine employed. He was carefully oriented about seven months in the future, and he made a similar initial response to this projection in time.

He was addressed as follows:

As I remember, I saw you last about two months ago. You came in to report upon your progress. I put you in a trance and had you visualize yourself in crystal balls so that you could give me full accounts. Now suppose you remember tonight all the things you said and saw that night about two months ago. Never mind anything I saw or did. Remember only the things you said and saw and did while you were giving me the report. (This was to prevent him from recalling

anything about preliminary or subsequent hypnotic instructions, particularly in relation to time projection.) Now review all those things. Some of them go way back to our first meeting and even way back to the beginning of the problem you brought to me. Think them over carefully, clearly, extensively and then discuss things for me.

The essential content of his discussion follows:

I was really a sorry mess when I met you. A whining crybaby. I don't see how you could have stood me. Dr. X deserves a gold medal for what he put up with. It embarrasses me to think about it.

I don't really know what happened. It was like a dream but it wasn't a dream. Whatever you said to me became true. I was a little boy, I was older, I was still older, sometimes all at the same time. Some way you made me live my life all over so I could see it. I really lived it, too. Then you made me see it in moving pictures in crystal balls. I was in the crystal balls. And I was outside watching. Some of the things I saw were pretty darn sad. But I was a sad sack myself.

But the thing I really liked but didn't have any hope about was when you made me tell you all the things I wanted to do. Then somehow I began doing those things. I can't understand that because I must have been in this room and I wasn't. (He was immediately interrupted and extensive hypnotic instructions were given that he report only on what he himself saw and did and that he was not to try to understand the situation.)

Well, I did every one of those things. Surprised myself! Boy, I really felt good about it. I enjoyed doing them. I sure was surprised when I asked that waitress for a date. She's a nice girl. And that raise was \$10.00. And when I told off that lug about blocking me in with his car, he took it like a man. And I felt like one! I've got to look up Dr. X some day because he was really interested in me. I guess he believed in me, even if he didn't help me.

He continued to review extensively with confidence, assurance, and pleasure, a further wealth of fantasied accomplishments, all in keeping with a suitable reality situation for him. They all apparently had the significance of absolute realities.

When he had finished, he was told that he was to be hypnotized. By this approach, it became possible to reorient him to current time. Again, as in the previous session, he was given extensive post-hypnotic suggestions to induce a comprehensive amnesia for trance events of all sorts.

Still in the trance, he was instructed ambiguously that his next appointment was possibly for next week but that it might or might not be kept; that various events would develop which would determine the time and manner in which he would keep the appointment. However, he would certainly be seen again; if not next week, quite possibly in two months' time.

He was awakened with post-hypnotic instructions for amnesia and dismissed with no mention of a future appointment. He appeared exhausted and self-absorbed.

He was not seen until eight weeks later. He arrived in a new suit. His car was newly painted and had new seat covers. An attractive young girl, a secretary, accompanied him.

His opening statement was that he felt that he would like to give the writer an account of the recent events that had occurred. His report may be summarized as follows:

For about a week after the last session, he had felt confused and bewildered. At the same time, he had a "feeling" that "something good was happening" to him. Then one day, he had wondered about his next appointment while at work but before he could clarify his thinking, he had impulsively asked his employer for a salary increase. Not only had this been granted, but he had been transferred to another and better position. This had given him a tremendous feeling of elation and self-confidence.

Upon leaving work that night, instead of waiting in his car and raging helplessly because he was boxed in, he hailed his persecutor and invited him to have a beer. During the drinking, he had told the man in a simple matter-of-fact tone of voice, "I think you have been blocking my car regularly because I've been such a damn sissy. From now on, you damn bastard, cut it out, and have another beer on me." This had ended that petty persecution.

Much elated by this, he dined at a different restaurant that night, fell into conversation with a waitress, and asked her for a date. She refused but, unperturbed, he went to the theater alone.

Subsequently, he had moved to another and better residential section. In the process of moving, he "went through all the trash I've been saving for years. I threw out all the junk. I really cleaned house." He had joined a Young Business Men's Club and had maneuvered himself a position on the weekly program. He felt that he had acquitted himself creditably.

From then on, "I began living a normal respectable life and enjoying things like an average man. I just suddenly got out of all my bad habits and feelings. It was easy once I got started. I just never tried that before. But one thing just naturally led to another and instead of feeling bad like I used to, I just get out and do something I ought to. I met my girl at a dance and we're going steady. But we are going to wait awhile to see if we're really interested. My health is good. I don't pay attention to every little ache or pain the way I used to. You got to put up with a cold or something like that instead of getting scared to death. Some day I'm going to see Dr. X and let him see me the way I really am. He was a good scout with me."

After still further discussion during which no effort was made by him to inquire into what had occurred in relation to the writer, he departed. He was seen casually from time to time thereafter in a social way. Two years later, he was still adjusting satisfactorily and he and the secretary were completing their plans for marriage.

PATIENT B

THIS CASE HISTORY concerns a long-continued highly circumscribed form of compulsive behavior.

The patient's mother had died when he was 12 years old. His father insisted that the son visit the mother's grave and place flowers on it every Saturday, Sunday and holiday, regardless of everything except absolute physical incapacitation.

On several occasions, the boy had played truant and had been brutally beaten by the father who had reacted to the mother's death by becoming a severe alcoholic.

When the patient reached the age of 15, the father, first giving the boy a most brutal beating to make him remember to visit the grave, had deserted him. For a year, the boy had lived in the home of a distant, unfriendly relative before striking out on his own.

For 15 years, summer or winter, rain, shine or snow, he made his pilgrimages to the grave, sometimes having to make regularly a round trip of 20-40 miles. Even during his courtship, he regularly took his fiancée on the Sunday pilgrimage.

During the years, physical illness had confined him to bed on several occasions and made him miss his regular trips. He had reacted by making extra visits during the week. The result had been a compulsion to make a daily trip. At the time of seeking therapy, he was making a daily round-trip of 20 miles.

He had attempted to break the compulsion by placing bouquets of dandelions or wild chicory blooms from the roadside on the grave, even limiting the offering to a single bloom and then to none at all. However, the compulsion proved to be that of a visit only. He then tried to break it by merely driving past the cemetery and hurrying home. A dozen such attempts had caused him such extreme anxiety, insomnia, panic, gastric symptoms and diarrhea that each time he had been forced to make a midnight trip to fulfill his "obligation."

His reason for seeking therapy was that he had recently been offered a most advantageous position in a distant city and the deadline for his acceptance was approaching. While both he and his wife were most eager to make the change, the thought of being unable to make the daily trip to the grave caused him to suffer intense panics.

Because time was short and his problem was circumscribed in character, intensive hypnotherapy was employed.

He proved to be an excellent somnambulistic subject and was easily taught to manifest hypnotic phenomena.

In a deep trance, he was asked to review his innumerable pilgrimages, his memories of his mother, and the nature and character of his feelings, particularly his resentments towards his father. He found this a most difficult task and possible only if he did it silently. Hence this approach was abandoned.

Accordingly, he was disoriented for time, and systematically oriented by projection into time *two weeks in the future*. Essentially, a technique comparable to that used for Patient A was employed. During the process of orienting him in the future, elaborate instruction was given to him to insure a calm, comfortable feeling and to induce an overwhelming interest in whatever the writer might have to say.

As soon as the new orientation had been secured, a casual conversation was begun with him which was carefully guided to the subject of his remarkably good muscular development, of which he was exceedingly proud. This led to an extolling of the patient's adherence to his principles in not smoking or drinking and of living a good, clean industrious, hardworking life.

When these ideas had been built up sufficiently, he was challengingly asked, apparently in a spirit of camaraderie, if he had the strength to stand up like a man under a shock. He replied that he could "stand up under anything that any man could dish out." This led to the writer's declaration that he could easily "floor" the patient "with a good wallop."

Entering readily into the spirit of the verbal exchange, the patient declared that the writer did not have "enough beef." After still further similar persiflage, he was warned, "Pick a spot on the floor to take a tumble, because I'm going to hit you hard and unexpectedly. Listen, here it comes. Now listen! You are a beautiful physical specimen, you live right, you work hard, you are a strong man, you are feeling good. Now here's the punch. Listen! *For two whole weeks you have not visited*

your mother's grave—not once for two whole weeks. Are you alive, are you strong, or are you a weakling that I can lay out with my little finger?"

His startled response was, "Good God, how did I stop?"

Before he could elaborate that question, he was emphatically admonished that *it was not the how, but the fact that he had stopped that was of significance, and that he could now feel happy and relieved that it had been done.*

Without pause, the writer continued with a rapid, general discussion of all the problems involved in packing, moving, finding a new home and getting settled. The patient was admonished emphatically to work out these matters to the last detail, since it was a problem that would require every possible bit of energy.

Very rapidly, he then reoriented to the current time and awakened with extensive post-hypnotic suggestions for a continued amnesia of all trance events. He was given an appointment in two weeks and dismissed. (Since it was known that his grave visits were a sore topic at home and never mentioned, no special precautions had to be taken.)

He reported promptly for his next interview and was cheerful and enthusiastic. He had accepted the new job and arrangements for moving were practically complete, and would be accomplished within the next week.

(Special inquiry had been made secretly of his wife who reported that, while he had worked regularly, he had been home each night approximately an hour earlier. Also, he had worked busily at packing the full day both Sundays as well as during all spare time during the two weeks).

Accordingly, his enthusiastic account of his new preparations was suddenly interrupted by the inquiry, "How does it feel to be happy, content, enthusiastic and really interested in the new job and *free from having to visit your mother's grave?*"

In startled amazement he declared, "Good God, I haven't done that for two weeks. I've been so busy."

Immediately, by means of a post-hypnotic cue to which he had been trained to respond, a deep trance was induced.

As if there had been no alteration in his level of awareness, the writer replied, "Yes, now that you are asleep, you now know that you were too busy. More than that, *you know now by actual experience that you don't need to visit the grave any more.* But, of course, if a legitimate occasion ever arises, you can do so in a normal way. Thus on Mother's Day you could, or some such occasion."

After some silent thought, he asked, "Is my father alive?" Reply was made "Neither you nor I know if he is dead and gone, we know only that he is gone and that you are a man."

Return was made to the question of the new job and after some further discussion, he was awakened.

At once, he returned to the moment preceding the post-hypnotic cue by remarking, "Two whole weeks! I don't understand it, but it's sure OK with me. Maybe taking that new job did something for me."

Therapeutically there was no reason for the patient to think otherwise. In final analysis, the outcome did derive from the opportunity for a new job.

Return was at once made to discussion of the new position and shortly he was dismissed.

In the ten years that have followed, only on those rare occasions when he visited the hometown would he visit the grave and then only if it was convenient. There

have been no other neurotic manifestations developed to replace the original compulsion.

PATIENT C

THIS NEXT CASE HISTORY also concerns a circumscribed problem but of another type. Psychiatric help had been repeatedly sought and always rejected on the specious grounds that cooperation was impossible.

The patient was a 20-year-old student nurse. When she was less than a year old, her mother had secured a divorce, broken off all ties with everyone she knew, moved to another state, and had destroyed every possible evidence of the father that she could.

As the patient grew older and inquired about her father, the mother simply stated she had divorced him, and that she knew nothing about what had happened to him since then. Additionally, the mother firmly refused to give any description of him or even to reveal the location of her former home.

Upon reaching the age of 18, the patient made a determined effort to learn something about her father. The mother's marriage certificate and divorce decree were locked, she was informed, in a safety deposit box and would remain there. As for the patient's birth certificate, it disclosed only that she had been born in Chicago. Her mother explained that her birth had been unexpectedly early and had occurred while she and the father were visiting some of the father's relatives in Chicago. As for the mother's maiden name, that, like the father's surname, was utterly commonplace and there would be no possible way of tracing identities.

Thoroughly frustrated by this, the patient had sought out psychiatrists who used hypnosis. She would demand that they hypnotize her and thereby compel her to remember something about her father. However, she would immediately establish an impasse by declaring that such a procedure would be ridiculous since she had no memories of him. Therefore, all that would be secured would be her "imaginings" and she did not want to have them passed off as genuine. Hence, she invariably refused to cooperate and at no time was she ever hypnotized.

When she came to the writer with the above story, her request was refused on the grounds that a search for memories before the age of one would be futile. (Actually, of course, she represented an interesting problem if her cooperation could be secured by a judicious use of negativism on the writer's part.)

She was reassured by this refusal of her request. Before the interview was terminated, she had become interested in hypnosis simply as a personal experience.

Accordingly, arrangements were made to train her for "experimental work." She readily became an excellent hypnotic subject except for the one procedure of age regression. This she would not permit and when indirect efforts were made, she invariably awakened to protest that "things seem to be going wrong."

Therefore, the measure of projecting her into the future was decided upon as a possible approach to her problem.

While she was in profound, somnambulistic trance state, an "experiment" was outlined for her for which she was to do some learning tasks. Then, it was explained, she was to be projected into the future and she would report upon that learning. Thus, the nature and character of her forgetting could be studied.

However, as a "preliminary" bit of training, she would first be projected in time

and induced to have fantasies of activities during the period of time between the current date and the future date.

Following these explanations (actually disguised instructions for her guidance) she was disoriented and then oriented to the future. No effort was made to ascertain the approximate date but various remarks permitted the deduction that the time projection was about two months.

She was asked to give a full account of that "remarkably interesting patient" she had cared for since that "last interview with me quite a few weeks ago." She executed this fantasy and several other of a comparable character. During the narration of them, mention was made repeatedly that she had probably forgotten a lot of the details, to which statement she was induced to agree.

She was then reminded that, "quite a long while ago," arrangements had been made to study her rate of forgetting and that the time had now come. Speaking rapidly to insure her full attention and to preclude her from analyzing the statements made, she was told:

1. I am positive you have forgotten completely a task I had you do awhile back.
2. I want you to work on the full assumption that you did it, even though you can't remember doing it.
3. I want you to recover as systematically as you can the memories of what you did.
4. It was an unexpected task for which you could make no plans to remember. Hence, you forgot it.
5. This task was done between the time of the last interview you remember and this present moment (Projected time).

The task was then described to her as regressing in age and recovering a variety of memories about her father, all of which she had now forgotten.

The proposal was offered that she now try to recall *what she might have discovered in that age regression* by whatever means she chose, crystal gazing, automatic writing, flashes of memory, or any other means she wished.

She hesitatingly suggested crystal gazing. Immediately the suggestion was offered that, in a series of crystal balls, she would see herself at descending age levels until she saw herself as an infant-in-arms. (As for Patient A, these crystal balls were "fixed.") These portrayals she was to study carefully until she felt certain that she had "rediscovered" the forgotten memories.

For half an hour she sat silently, absorbed in this task. Finally she turned to the writer and indicated that she was through. Instructing her to keep the memories and to report them in any way she wished, the crystal balls were removed by suggestion. (The reason for this was to prevent her from developing tangential interests by observing again the crystal balls.)

She was asked what she thought about the experience. Her reply was the startling request that the writer examine the back of her right knee.

That examination revealed an old, small, jagged scar. Told about this, she explained, "I saw myself as a little girl. I was six years old. I was playing. I was running backwards. I tripped over the root of a tree. My leg hurt. I got up crying. Then a lot of blood ran down my leg. I was scared. Then the crystal ball disappeared."

After some moments of silent thought she continued, "I'm all mixed up. I think different ways about time. I don't like it. I think you better straighten my mind out

and tell me to remember everything. I think I'm in a mixed-up trance. Wake me up."

She was reoriented and awakened with instructions for full recollection of memories.

Soberly she began, "I saw me fall. I've got the scar. You found it. I don't remember it. I just saw it in the crystal ball. Maybe the other things are true, too."

"First I'll tell you and then I'll tell my mother. Then I'll know. This is what I saw: I could say 'Daddy.' My father was holding me. He seemed to be awful tall. He was smiling. He had a funny looking tooth, a front tooth. His eyes were blue. His hair was curly. And it looked yellowish. Now I'm going home and tell my mother."

The next day she reported, "They were real memories. It shocked mother. When I got home I told her, 'I've found out what my father looked like. He was tall, blue-eyed, (she and her mother were brown-eyed and five feet three inches tall) and curly-haired. It was almost yellow and he had a gold front tooth. Mother was frightened. She wanted to know how I found him. So I told her about what we did. After awhile she said, 'Yes, your father was six feet tall, blue-eyed, yellowish-red curly hair and he had a gold tooth. He left me when you were eleven months old. I'll tell you anything else you want to know now, and then let's not talk about it any more. I know nothing about him at the present.' "

However, the patient's curiosity was satisfied. She was used subsequently for experimental work. Although she was given opportunities over a year's time to manifest further concern about her original problem, she seemed to have lost all interest in it.

PATIENT D

THIS CASE HISTORY centers around an impasse reached during therapy and the utilization of a fantasy about the future to secure an effective resumption of therapeutic progress.

The patient suffered from a profound anxiety neurosis with severe depressive and withdrawal reactions and marked dependency patterns. A great deal of hypnotherapy had been done and her early response was good. However, as therapy continued, she became increasingly negative and resistive.

Finally, the situation became one in which she limited herself, during the therapeutic hour, to an intellectual appraisal of her problems and her needs, while rigidly maintaining the *status quo* at all other times.

A few examples will suffice to illustrate her behavior. She could not, for cogent reasons, tolerate her parental home situation but she persisted in remaining in it despite actual difficulties and in the face of favorable opportunities to leave. She resented her employment situation bitterly, but refused to accept a promotion actually available. She recognized fully her need for social activities but avoided, often with difficulty, all opportunities. She discussed at length her interest in reading and the long hours she spent in her room futilely wishing for something to read, but she refused to enter the library she passed twice daily, despite numerous promises to herself.

Additionally, she became increasingly demanding that the writer must, perforce,

take definitive action to compel her to do those things she recognized as necessary and proper but which she could not bring herself to do.

After many futile hours, she finally centered her wishful thinking upon the idea that, if she could achieve even one of the desired things, she would then have the impetus and firmness of intention to achieve the others.

After she had emphasized and reemphasized this statement, it was accepted at face value.

She was then immediately hypnotized deeply, and, in the somnambulistic state, instructed to see a whole series of crystal balls. In each of these would be depicted a significant experience in her life. These she was to study, making comparisons, drawing contrasts, and noting the continuity of various elements from one age level to another. Out of this study would slowly emerge a constellation of ideas which would be formulated without her awareness. This formulation would become manifest to her through another and larger crystal ball in which she would see herself depicted pleasantly, happily and desirably, in some future activity.

She spent approximately an hour absorbedly studying the various hallucinatory scenes, now and then glancing about the office as if looking for the other crystal ball.

Finally, she located it and thereupon gave all of her attention to it, describing the hallucinated scene to the writer with avid interest.

It was the depiction of a wedding scene of a lifelong family friend which, in actuality, was not to take place for more than three months. She saw frequent "close-ups" of herself and of others. She described the wedding ceremony, the reception and the dance that followed. She was particularly interested in the dress her image was wearing but could only describe it as "beautiful." She watched the dancing, identified some of the men with whom she danced, and named the one who asked her for a date. Over and over she commented on how happy she looked and what a contrast there was between her appearance now and her appearance at the wedding.

It was difficult to get her to cease watching the scene of the wedding party, since she was so interested in it and because she was so pleased by her behavior in it.

Finally, she was instructed to keep all that she had seen in her unconscious and to have a waking amnesia for the trance experiences. Furthermore, it was explained, this would constitute a tremendous motivating force by which all of her understandings could be utilized constructively.

She was then awakened and dismissed with a post-hypnotic suggestion for continuance of the amnesia.

There were only two more therapeutic interviews and both of these were limited in scope by the patient. Each time she stated that she had nothing to say until she had been hypnotized.

Once this was done, she stated both times that she wanted instructions to remember in her unconscious very clearly all that she had seen and thought and felt as she watched the wedding scene. The desired instructions were given each time; after about half an hour of silent thoughtfulness in the trance state, she asked to be awakened and dismissed. At the second visit, she terminated therapy.

She was not seen until several days after the wedding three months later.

Then she entered the office without an appointment and explained, "I've come to tell you about Nadine's wedding. I have an odd feeling that you know all about it and yet don't know a thing. But I do know that I have to give you an explanation for some reason."

Her explanation was that she, Nadine and the bridegroom had been lifelong friends and that their families were intimate friends. Some three months ago, following a therapeutic session, she had felt impelled to discontinue therapy and to devote her energies to getting ready for that wedding. When she was asked to be a bridesmaid, she decided to make her own dress. This had made it necessary to get promoted at work so that she would have better hours. Then she had taken an apartment in town so that she would not lose a total of three hours going back and forth from work. She had gone on shopping tours with various friends to help select wedding presents and she had arranged for "showers" for the bride-to-be. All in all, she had been exceedingly and happily busy.

She described the wedding scene, the reception and the dance. She was decidedly startled when the writer asked if she had danced with Ed and if he were the one who asked her for a date. She answered in considerable bewilderment that she could not understand, since she had not mentioned his name, how the writer could ask such a specific question. She danced with Ed, but had forestalled his request for a date since she considered him not to be up to her standard. However, she had accepted a date from another dancing partner.

Finally she was reminded of her original purpose in seeing the writer. Her reply was simply, "I was a pretty sick girl when I first came to see you. I was horribly mixed up and I'm grateful to you for getting me straightened out in time so that I could get ready for the wedding." She had no awareness that her preparations for the wedding constituted her recovery.

She has been seen occasionally since then on a casual basis. She is happily married and the mother of three children.

PATIENT E

IN THIS CASE HISTORY, the patient was not interested in therapy and did not know that she needed therapy, but she was interested in hypnosis as a personal experience that might be enjoyed. Very early in hypnotizing her, the realization was reached that, despite her seemingly good adjustment, therapy was seriously indicated.

She was a 19-year-old student nurse of good intelligence, pretty, vivacious, likeable, but annoyingly flippant in her general attitudes. She proved to be an excellent somnambulistic subject and interested in experimental hypnotic work.

It was soon discovered that she had a mild avoidance phobia for water fountains and flower vases. Hypnotic exploration of this rapidly disclosed other items of psychopathology, which she confirmed in the waking state. Among these were the following:

1. She had learned to swim well when she was about ten years old. However, she had not been able, for some unknown reason, to swim for at least the last five years. Yet each season, she would go to the lake to swim, don her bathing suit and walk expectantly down to the shore. As her feet touched the water she would turn and run away screaming as a result of a sudden, unexpected impulse. Several hundred feet away, she would gain control of herself, and embarrassedly walk back to the shore, fully expecting to swim, but only repeating her previous uncontrollable impulsive behavior. Each time it occurred, she did not believe it would happen again.

2. She would accept an invitation to go to the theater with some young man.

Once inside, she would slip away from her escort and then leave by a side entrance and go home alone. Or if she went to dinner, she would, at the close of the meal, excuse herself to go to the rest room and either wait it out there until her escort left in disgust or depart by a back door.

3. Her attitude toward marriage as a possibility for herself was one of bitter intolerance. So intense was her hostility on this topic that she would not discuss it except to declare that this was her "normal" feeling and that she had no particular reason for disparaging marriage so completely.

4. There were a number of other items of psychopathology but these were not discovered until after therapy had been accomplished.

When the question of therapy was raised with her, she agreed to it provided the therapy were limited to the correction of her swimming problem. She did not realize that therapy in that regard might correct other maladjustments.

Treatment was initiated by training her fully as a hypnotic subject. This she enjoyed but she was really interested in therapy.

Age regression was employed extensively and a series of traumatic deeply repressed memories were recovered and the experiences relived by her. Some of these were as follows:

1. When she was about five years old, she and her two-year-old sister were playing about a washtub full of water, while the mother was out of the room. The sister fell into the tub and the patient struggled to pull her out while screaming for her mother. When the mother came, she rescued the baby, who had "turned blue," and spanked the patient most severely "for pushing sister in the water."

2. At about the same period, sister, while sitting in the highchair at the table, managed to tip herself over. The patient rushed across the room with arms outstretched to rescue her. She arrived too late, just as her mother entered to see the patient's outstretched arms and the toppling chair. Again she was severely punished.

3. When she was about six years old, a neighbor volunteered to teach her to swim. This neighbor believed that a child's fear of water is best cured by complete immersion. The patient became extremely frightened, fought, screamed and bit. Her "misbehavior" resulted in another spanking.

4. At about this same age, a neighbor died and the patient was sent to the grandmother's house while the mother attended the funeral. That night, the patient returned home and was awakened by her father's coughing (he was bedridden and slowly dying of pulmonary tuberculosis). Distressed by the coughing, she aroused her mother and explained that she wished her father would die. Without seeking the patient's reasons for this wish (when people die, you go to Grandmother's and get cookies and candy, and Daddy likes cookies and candy, so why can't he die and go to Grandma's?), the mother punished her severely.

5. When she was about eight years old, contrary to her mother's orders, she tried to cross a creek on a fallen log used as a footbridge. She slipped, fell and saved herself by embracing the log. After much screaming, she was finally rescued by her older brother, who subsequently intimidated her by threats of reporting the escapade.

6. When she was about 12 years old, she and her sister, both having learned to swim well two years previously, went swimming. The water was cold and the sister became cyanotic but refused to leave the water despite the patient's frantic pleading and crying.

7. Because of the above experience, she had later refused to go swimming with her sister and brother. He had forcibly dragged her into the water. She fought him so furiously that they "both nearly drowned." She could not remember ever again swimming.

Although the patient relived these various experiences with vivid emotional intensity in the trance state, she protested that they had been forgotten events. Therefore, they ought to remain forgotten, and she declared emphatically that she would not remember them when she awakened.

Furthermore, she demanded that the writer begin therapy on her swimming problem immediately. He was to do this in a "subtle" way so that she would not suffer any more emotional stress. Efforts to correct her attitude while she was still in the trance were futile, as proved to be the case when she was awakened.

At the next interview, the patient was definitely hostile. She declared that she had lost her interest in experimental hypnosis, but that she was interested in prompt and immediate correction of her "swimming problem and nothing more." In the trance state, she confirmed this attitude but was much less hostile. She also declared that she did not want to remember consciously any of the memories previously recovered in hypnosis since they had "once been forgotten and might as well stay that way."

Accordingly, her demand was accepted and she was assured that all efforts would now be directed as she wished.

She was then disoriented for time and reoriented approximately three weeks into the future. Immediately she was told that, *since therapy had been terminated the first part of June and it was now the latter part*, one thing remained to be done. The opportunity to do this, in fact, was rapidly approaching. Her vacation would occur in the latter part of July and the first part of August. Therefore, it would be well to plan how to utilize that vacation to establish her therapeutic gains on a reality basis.

Thereupon, she and the writer collaboratively devised the following plan:

She would spend the vacation at a summer home on a lake well known to her. She was to purchase a new bathing suit and a small waterproof silk bag large enough to hold a package of cigarettes and matches. This bag would be carefully attached to her bathing suit for the first two days, if necessary, but would be dispensed with in much less time.

The cigarettes and matches would now be presented to her, a package of Lucky Strikes (ordinarily she refused to smoke other than her own particular brand of cigarettes) on which the writer would inscribe in her presence, "This really is a lucky strike." These she would now put into her handbag with the matches slipped into the cellophane wrapper and she would keep them hidden from her conscious mind until the time came to use them.

At the lake, and in the form of post-hypnotic behavior, she would attach the waterproof bag containing the cigarettes and matches to her bathing suit.

Then, she was to stroll down to the beach speculating consciously about sitting on the raft and wondering whether she would sit facing out over the lake or facing the shore.

Once on the raft, she would experience an overwhelming desire for a cigarette. While wishing for one and dangling her feet in the water, she would "accidentally" discover the waterproof bag and explore the contents. She would

be so delighted that she would immediately light a cigarette and only while puffing it would she begin to wonder where they came from. Examination of the package would lead to the discovery of the writing on it. While she pondered its meaning she would finish the cigarette, toss the butt into the water and strike out for shore still puzzled about the inscription.

Upon reaching shore, she would realize that she had left the cigarettes on the raft and she would turn and strike out for the raft again. Upon arriving at the raft, she would be hungry for another cigarette and would smoke again.

As she smoked she would suddenly remember completely everything that had happened since she had donned her bathing suit.

The patient listened attentively to these elaborate instructions and comprehended readily what she was to do.

While she was still in the trance state, she was then "disoriented" for "the latter part of June" and projected in time to September in the situation of entering the office. She was asked, "Well, what really happened on your vacation?"

Her narrative was essentially as follows:

"When I started to get undressed to put on my suit, I had an awful time. I was so absent-minded. Then when I went down to the beach I was wondering why nobody was on the raft and I decided to sit on it. The next thing I was ravenous for a cigarette. Then everything happened just as you said last June. I smoked a cigarette and struck out for shore, but then I had to go back and get my cigarettes. Then I started to remember everything about undressing and getting that silk bag fastened to my suit, thinking about the raft and swimming out there twice. And then I knew I was over my swimming problem and I really enjoyed swimming every day. Now I'm back at work and everything is swell."

She was reoriented to the current time and emphatically instructed to obey to the last detail all instructions that she had ever, *at any time*, been given when in a trance state. With equal emphasis, she was instructed to keep all unconscious knowledge from her conscious mind. This must absolutely be done until such time, if it ever did occur, both she and the writer independently would approve of her conscious awareness of things unconscious. This instruction, in accord with her previously expressed attitude, she accepted most readily.

She was awakened and dismissed. The cigarettes and matches had been carefully wrapped in tissue and concealed in her handbag.

She was seen again in September. She entered the office with a merry laugh and declared:

"Well, you already know everything that happened on my vacation. It all happened just as you said. By the end of my vacation, I got so puzzled by everything that I sat down one day and deliberately remembered everything. It was so confusing because I started with the appointment I had with you in the first part of June. I really had a lot of trouble getting straight about "the last part of June" and then "September" and making them both fit into the real time. Puzzling that out was a job but I got it straight. You ought to try to think a thing out like that. At first, the last part of June and September were just as real as any other memories. I knew they couldn't be so but they were real and it was a terrific job, exciting and interesting.

But when I got them straightened out, I could see them as ideas that I had for the future and then I was straight in my mind.

That's when the real merry-go-round started. That's when I started to remember everything that happened since you began to work with me—all those things you dug out of me. If you had as much fun digging them out as I had remembering them and putting them together to make sense, I won't have to apologize for being so stubborn.

The whole thing went pretty fast. I puzzled all morning one day and then after lunch I really sat down and started my think-trap going and by dinner time I had everything straight.

That first September report wasn't right in some things.

What really happened started in June, after that trance that started things.

I started getting ready for my vacation. The first thing I had to do was to get a bathing suit. I was looking for a special suit but I didn't realize it then. I didn't know it was blue.

Then I had a job finding a waterproof silk bag to send overseas to someone—I hadn't really made up my mind who, so I couldn't send it after I got it.

Then I misplaced my handbag. Every time I found it again, it got misplaced again. The last place I found it was in the suitcase I took to the lake. I can remember now all the tricks my unconscious played on me to keep those cigarettes hidden from my conscious mind.

Well, the rest at the lake was like you said except that when I was hanging my feet in the water on the raft, I kept worrying about the toenail polish coming off. I kept wondering what happened to me because I was enjoying the swimming.

But that isn't all. After I remembered all those other things you dug out, I knew I could handle them but I didn't know what I was going to do. I had to wait till I got home.

I'll tell you them now, all except one. I'll tell you that next time.

For years and years I have wanted to take a hot soak in the bathtub. I always filled the tub full and then I would step in, pull out the plug and take a shower. It always made me so mad, but I did it every time. And if there wasn't a shower, I'd just stand in the tub and sponge myself. Now I can take a tub bath.

Another thing! I can drive a car now. I had to give it up because I got in the habit of shutting my eyes and speeding up, sometimes in the city, sometimes in the country. Remember the footbridge—well, I always did that to cross bridges but I just realized that up at the lake. Now I don't shut my eyes to drive over a bridge.

Those poor guys that dated me and took me out! That neighbor that took me out in the water and wouldn't let me come back and ducked me. Well, I let those poor fellows take me out and I made sure I got back.

And Sis and the highchair! You couldn't hire me to stay in a place where there was a baby in a highchair. Some of the nurses invited me to their parties for dinner and after I got in the house I just walked out. I didn't know why then. Now I can visit people who have babies in highchairs.

And Sis getting blue when she was a baby and then when we went swimming that time. I've never worn anything blue because of that and it's becoming to me. First the blue bathing suit and now this new outfit I've got on.

And I've joined the church. I always wanted to go but couldn't stand being in a church. I even took my training in a Catholic Hospital because I'm Protestant and I wanted to be sure to keep away from church. But just because they have funerals in church doesn't stop me. There are a lot of other little things but you get the

general idea. What I don't understand is how I kept all this in my unconscious and made everything so tough for me. How can a person be so stupid and so stubborn? I suppose you're going to call me stubborn now because I'm not going to tell you the most important thing that happened. But I'm not really stubborn because I've got a good reason this time and I'm going to tell you the next time I see you."

She was not seen again until mid-October. As she entered the office, she said: "I'm ready to tell you, but first I've got to explain a little.

Mother had it awful hard when we were kids—looking after us, taking care of Father, earning a living for us. I thought that marriage was horrible, just trouble and work and heartache and that husbands were always sick. I just never straightened out that idea. So last month, I visited Mother and had a long talk with her. I didn't tell her those things you dug up out of my unconscious. We just talked about when the kids were little and my father was sick. She really loved Father and she doesn't think she had it so hard. I wish I'd had enough sense to get her ideas before, instead of keeping my kid ideas in my unconscious. So I told her about Joe, how we're going steady since I got back from vacation. She was very pleased when I told her I was going to get married some time next year. She never did like nursing for me and now I wonder why I took it up—my father, I suppose. But now, I want a home and kids and a husband. So now I'll introduce you to Joe—he's waiting outside."

The young couple were seen casually on several occasions before their marriage. When their first child was about a year old, a visit was made to them and at this time, the mother was met.

During the course of that visit, the mother who knew that her daughter had been the writer's patient and had been hypnotized, expressed an interest in being hypnotized also.

Immediately the daughter was asked if she had ever given any account of her hypnotic experiences to the mother. This was disclaimed.

The mother proved to be an unusually good subject and responded readily to age regression. She was regressed to the time, "when your daughter was between four and a half and six years old, at which time something may have occurred that frightened you and her very much."

Among the things elicited was a similar account of the washtub episode. The patient's age was given "as almost two months past her birthday."

Similarly, a comparable account was obtained of the highchair episode. The patient was then about five years and nine months old.

The swimming lesson by the neighbor and the funeral episode were both adequately confirmed, including the midnight spanking for the "death wish."

The fallen log footbridge episode apparently was not known to the mother. She did relive an episode, when asked to be sure to speak to her daughter about "something on the west side of the house," of anxiously cautioning the patient "never, never walk on that tree that fell across the creek in that bad windstorm."

The mother was awakened with instructions to remember fully what had happened in the trance.

She was tremendously startled by the recovery of these memories. She, her daughter and the writer spent a considerable period of time discussing those past experiences. The mother showed good capacity to understand and she was relieved to know that the "death wish" was something entirely different.

Some months later, the mother was seen again. The purpose of her visit was to find out if there were any other things that she had done that she ought to talk over with her daughter.

She was hypnotized and told that she would remember freely and comfortably and discuss anything of actual interest to her daughter whenever the occasion arose. A social telephone call from the daughter some months later disclosed that the two of them had been reminiscing happily and contentedly and that she had a very pleasing recollection of her childhood.

The patient's adjustments have remained good. Her relationships with her mother have continued to be happy and she is much more interested in her two children than in any professional career.

COMMENT

THE FIRST DISCUSSION of these therapeutic experimental procedures should concern how fantasied accomplishments could have proved such effective measures of therapy. We all know, from common experience, how easy it is to fantasy great deeds, and how far short fall the endeavors in reality. The fantasied story is such a masterpiece until it is set on paper, and the beautiful painting, so clearly visualized in the mind's eye, becomes a daub when the brush is applied to the canvas. It must be borne in mind that such fantasies as these are conscious fantasies. Thus they represent accomplishments apart from reality, complete in themselves, and expressive (recognizedly so to the person) of no more than conscious, hopeful, wishful thinking.

Unconscious fantasies, however, belong to another category of psychological functioning. They are not accomplishments complete in themselves, nor are they apart from reality. Rather, they are psychological constructs in various degrees of formulation for which the unconscious stands ready, or is actually awaiting an opportunity, to make a part of reality. They are not significant merely of wishful desire but rather of actual intention at the opportune time. Thus one can endeavor to record a fantasied story on paper, but its merit may derive from the "sudden flashes of inspiration that come unbidden to the mind." Or an author may consciously endeavor to write a novel and find that his characters "do not behave but run away with him."

In these case histories, extensive emphasis was placed upon fantasies concerning the future and every effort was made to keep them unconscious by prohibitive and inhibitive suggestions. By so doing, each patient's unconscious was provided with a wealth of formulated ideas unknown to the conscious mind. Then, in response to the innate needs and desires of the total personality, the unconscious could utilize those ideas by translating them into realities of daily life as spontaneous responsive behavior in opportune situations.

An experimental illustration of this may be cited. A normal hypnotic subject who disliked ostentatious display of learning and who spoke only English, was taught in a deep trance to recite the German poem "Die Lorelei." This was done as a seeming part of an experiment on memory that was being completed, and without informing him that he was learning a poem or that it was in German. A post-hypnotic amnesia for this task was then suggested.

About two weeks later at a social gathering, through pre-arrangement, a col-

league of the writer offered to entertain the group by singing and reciting variously in Polish, German, Italian, French and Spanish. After listening with increasing displeasure, the subject remarked, "I can talk in nonsense syllables, too," and proceeded to recite "Die Lorelei."

To his full conscious understanding, the subject's utterances were no more than nonsense syllables spontaneously offered in the immediate situation. Rehypnosis was necessary to convince him otherwise.

This experiment differs from the case histories in that future possibilities in a life situation were not a part of the experimental situation. Rather, the subject's unconscious was provided with special learning and then later an opportunity was created in which that special learning could become manifest in response to inner personal needs.

For the patients, special understandings for the future were developed in their unconscious minds, and their actual life situations presented the reality opportunities to utilize those ideas in responsive behavior in accord with their inner needs and desires.

The fashion in which the patients made their fantasies a part of their reality life was in keeping with the ordinary natural evolution of spontaneous behavior responses to reality. It was not in compliance with therapeutic suggestions nor did it seem to derive even indirectly from anything other than the patients' responses to their realities. Furthermore, their behavior was experienced by them as arising within them and in relation to their needs in their immediate life situation.

Thus, Patient A vaguely wondered about his next appointment with the writer and acted on a sudden impulse to ask for a raise in salary, which, in turn, led to a series of events. Patient D did not leave the parental home for the cogent reasons she had discussed with the writer but because she wanted to make a dress she wished to wear. And Patient E responded to her fantasies by searching blindly for a bathing suit that met unconscious needs related to her distant past. So it was with the other two patients.

The kind of fantasies by which the patients achieved their goals is of marked interest and significance. They were not of the elaborate grandiose type that one commonly has when fantasizing consciously about one's wishes. They were fantasies in keeping with their understandings of actually attainable goals. For example, Patient A was pitifully modest in wishing for "just fair" health. Nor did he think of winning a fight, but hoped to be able to "take a licking like a man." Patient B's thinking did not center around visions of receiving one promotion after another but dealt with the humdrum realities of packing and moving. Patient C validated her fantasies in terms of a reality scar and her father was just a man with a "funny-looking tooth." And Patient D saw herself in her fantasy not as a star in the entertainment world, but as a happy guest at a friend's wedding.

So it was with all the fantasies about the future experienced by these patients. There was no running away of the imagination but a serious appraisal in fantasy form of reality possibilities in keeping with their understanding of themselves.

To speculate upon the question of why and how "time projection" proved to be an effective therapeutic measure for these patients is difficult. One can hardly do more than to draw parallels with experiences common in everyday life. An example comparable to the above case reports is that of writing, after much indecision, a letter accepting a new position. Once it has been written, even though not yet

mailed, there develops immediately a profound feeling that the die has been irreversibly cast. There results then a new psychological orientation of compelling force, effecting a new organization of thinking and planning. The writing of the letter constituted an initiation of action, and an action once initiated tends to continue.

For these patients, apparently, the establishment of a dissociated state in which they could feel and believe that they had achieved certain things of benefit to them, gave them a profound feeling of accomplished realities which, in turn, resulted in the desired therapeutic reorientation.

Special Techniques of Brief Hypnotherapy*

THE DEVELOPMENT of neurotic symptoms constitutes behavior of a defensive protective character. Because it is an unconscious process, excluded from conscious understandings, it is blind and groping in nature, does not serve personality purposes usefully, and tends to be handicapping and disabling in its effects. Therapy of such distorted behavior ordinarily presupposes that there must be a correction of the underlying causation. This in turn presupposes not only a fundamental willingness on the part of the patient for adequate therapy but also an opportunity and situation conducive to treatment. In the absence of one or both of these requisites, psychotherapeutic goals and methods must be reordered to meet as adequately as possible the total reality situation.

What can really be done about neurotic symptomatology where the realities of the patient and his life situation constitute a barrier to comprehensive treatment? Efforts at symptom removal by hypnosis, persuasion, reconditioning, etc. are usually futile. Almost invariably, there is a return of the symptomatology in the same form or another guise, with increased resistance to therapy.

Equally futile, under such limiting circumstances, is any effort to center treatment around the therapist's conception of what is needed, proper and desirable. Instead, it is imperative that recognition be given to the fact that comprehensive therapy is unacceptable to some patients. Their total pattern of adjustment is based upon the continuance of certain maladjustments which derive from actual frailties. Hence, any correction of those maladjustments would be undesirable if not actually impossible. Similarly, the realities of time and situational restrictions can render comprehensive therapy impossible and hence, frustrating, unacceptable and intolerable to the patient.

Therefore, a proper therapeutic goal is one that aids the patient to function as adequately and constructively as possible under those internal and external handicaps that constitute a part of his life situation and needs.

Consequently, the therapeutic task becomes a problem of intentionally utilizing neurotic symptomatology to meet the unique needs of the patient. Such utilization must satisfy the compelling desire for neurotic handicaps, the limitations imposed upon therapy by external forces, and above all, provide adequately for constructive adjustments aided rather than handicapped by the continuance of neuroticisms. Such utilization is illustrated in the following case reports by special hypnotherapeutic techniques of symptom substitution, transformation, amelioration and the induction of corrective emotional response.

SYMPTOM SUBSTITUTION

IN THE TWO FOLLOWING CASES, neither a willingness for adequate therapy nor a favorable reality situation existed. Hence, therapy was based upon a process of symptom substitution, a vastly different method from symptom removal. There resulted a satisfaction of the patient's needs for defensive neurotic manifestations

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and an achievement of satisfactory adjustments, aided by continued neurotic behavior.

Patient A

A 59-year-old uneducated manual laborer, who had worked at the same job for 34 years with the expectation of a pension at the end of 35 years, fell and injured himself slightly. He reacted with an hysterical paralysis of the right arm. The company physician agreed to one week's hospitalization. Then, if the patient had not recovered from his "nonsense" at the expiration of that time, he was to be discharged as mentally ill with forfeiture of his pension.

Examination disclosed the patient's arm to be flexed at the elbow and held rigidly across the chest, with the hand tightly closed. During sleep, the arm was relaxed, and the original diagnosis of an hysterical disability was confirmed. No history other than the above was obtained since the patient was uncommunicative and spent his waking time groaning and complaining about severe pain.

After enlisting the aid of two other physicians, an elaborate physical examination was performed. The findings were discussed with much pessimism and foreboding about his recovery. This was done in low tones, barely but sufficiently audible to the patient. Everybody agreed that it was an "Inertia Syndrome," but that hypnosis would have to be performed in order to confirm that diagnosis. The prognosis was solemnly discussed and everyone agreed that, if it was the serious condition suspected, its course would be rapid and characteristic. This progression of the disease would be characterized by a relaxation of the shoulder joint, permitting arm movement within the next two days. Unfortunately, this would be accompanied by a "warm, hard feeling" in the right wrist. Then the elbow would lose its stiffness, but this would settle in the wrist. Finally, within a week's time, the fingers would relax and their stiffness would also settle in the wrist. This wrist stiffness would lead to a sense of fatigue in the wrist, but only upon use of the right arm. During rest and idleness, there would be no symptomatology. Impressive medical terminology was freely employed during this discussion, but every care was taken to insure the desired understanding of it by the patient. The patient was approached about hypnosis and readily agreed. He developed a good trance, but retained his symptoms in the trance state.

A physical reexamination was enthusiastically performed and the same discussion was repeated, this time in a manner expressive of absolute conviction. With definite excitement, one of the physicians discovered signs of relaxation of the shoulder muscles. The others confirmed his discovery. Then "tests" applied disclosed "early changes in the first, fourth and fifth nerves" of the elbow. All agreed, after solemn debate, that the second and third nerve changes should be slower, and that the general pattern left no doubt whatsoever about the diagnosis of "Inertia Syndrome" with its eventual and rapid culmination in a permanent wrist impairment. All agreed that there would be free use of the arm and that the wrist fatigue would be apparent but endurable during work. Everyone was pleased that it was a physical problem that could be surmounted and not a mental condition.

The patient's progress was exactly as described to him. Each day, the physicians solemnly visited him and expressed their gratification over their diagnostic acumen. He was discharged at the end of the week with his stiff wrist. He returned to work, completed the year and was retired on a pension. The wrist had troubled him with

its fatigability but had not interfered with his work. Upon retiring, all symptomatology vanished.

However farcical the above procedure may seem in itself, it possessed the remarkable and rare virtue of being satisfying to the patient as a person and meeting his symptomatic needs adequately.

Patient B

A factory laborer, following a minor injury at work, developed an hysterical paralysis of the right arm which invalidated him. A settlement had been made which would be exhausted in less than another year. At the insistence of the company physician, he was sent to the writer for hypnotic therapy. The patient was antagonistic toward treatment, felt that the company was victimizing him, and stated that he would agree to only three sessions.

On taking his history, it was learned that several years previously, he had had removed by hypnotic suggestion a paralysis of the left leg. Shortly after his "recovery," his left arm became paralyzed. Again hypnotic suggestion had effected a cure, followed this time by a right leg paralysis. This also had been cured by hypnotic suggestion, and now he had a right arm paralysis.

This background suggested both the inadvisability of direct hypnosis and a need by the patient for some neurotic handicap. Accordingly, the company physician was consulted and therapeutic plans outlined. He agreed to them and promised full cooperation on the part of the company for a work placement for the patient.

A therapeutic approach was made by bringing out medical atlases and discussing endlessly and monotonously, in pseudo-erudite fashion, muscles, nerves, blood vessels and lymphatic channels. This discussion was increasingly interspersed with trance suggestions until the patient developed a somnambulistic trance state. The whole discussion was then repeated. It was followed by the reading from textbooks of carefully chosen sentences describing the fleeting, evanescent and changing symptoms of multiple sclerosis and other conditions, interspersed with illustrative, fabricated case histories. The possibility of a comparable changing symptomatology for him and its possible and probable establishment in a permanent fashion was insidiously and repetitiously hinted.

The next two sessions were of a comparable character, except that numerous pseudo-tests were made of the nerves in his arms. These tests were interpreted conclusively to signify that a certain final, permanent disability would be an inevitable development. This would be the loss of the functioning of his right little finger but with full use otherwise of the whole arm.

The third session was completed by a review of the pseudo-test findings and a consultation of the medical atlases with numerous references to textbooks. All this led to the inevitable conclusion that, within another month, there would be a numbness and stiffness of his little finger which would always be slightly unpleasant but which would not interfere with his employment.

Approximately a month later, the patient volunteered to relinquish half of the remaining weekly disability of a lump sum settlement and reinstatement at work. This was granted and he applied the money to the mortgage on his home. The company physician secured a placement where a disabled right little finger did not constitute a problem.

Three years later, the man was still steadily and productively employed. However, he had informed the company physician that the writer was mistaken in one

regard: his finger was not constantly crippled but its condition waxed and waned from time to time, never really causing difficulty but merely making itself apparent.

COMMENT

APPARENTLY BOTH PATIENTS desperately needed a neurotic disability in order to face their life situations. No possibility existed for the correction of causative underlying maladjustments. Therefore, as therapy, there was substituted for the existing neurotic disability another, comparable in kind, nonincapacitating in character and symptomatically satisfying to them as constructively functioning personalities. As a result both received that aid and impetus that permitted them to make a good reality adjustment. Although more in the way of understanding the total problems involved could be desired, the essential fact remains that the patients' needs were met sufficiently well to afford them the achievement of a satisfying, constructive personal success.

SYMPTOM TRANSFORMATION

IN THE NEXT TWO CASES, the therapeutically restricting factors were limitations imposed by time and situational realities. Accordingly, therapy was based upon a technique of symptom transformation. While seemingly similar to symptom substitution, it differs significantly in that there is a utilization of neurotic behavior by a transformation of the personality purposes it serves without an attack upon the symptomatology itself.

In understanding this technique, it may be well to keep in mind the pattern of the magician which is not intended to inform but to distract so that his purposes may be accomplished.

Patient C

During the psychiatric examination, a selectee, otherwise normal in his adjustment, disclosed a history of persistent enuresis since the age of puberty. Though much distressed by this, he had otherwise made a good social, personal and economic adjustment. However, because of his enuresis, he had never dared to be away from home overnight, although he had often wished to visit his grandparents and other relatives who lived at a considerable distance. Particularly did he wish to visit them because of impending military service. He was much distressed to learn that enuresis would exclude him from service and he asked urgently if something could be done to cure him. He explained that he had taken barrels of medicine, had been cystoscoped, and numerous other procedures had been employed upon him, all to no avail.

He was told that he could probably get some effective aid if he was willing to be hypnotized. To this, he agreed readily and developed a profound trance quickly. In this trance state, he was assured most emphatically that his bed-wetting was psychological in origin and that he would have no real difficulty in overcoming it if he obeyed instructions completely.

In the form of post-hypnotic suggestions, he was told that, after returning home, he was to go to a neighboring city and engage a hotel room. He was to have his meals sent up to him and to remain continuously in his room until three nights had elapsed. Upon entering the room, he was to make himself comfortable and to

begin to think about how frightened and distressed he would be when the maid, as his mother always did, discovered a wet bed the next morning. He was to go over and over these thoughts, speculating unhappily upon his inevitable humiliated, anxious and fearful reactions. Suddenly, the idea would cross his mind about what an amazing but bitter joke it would be on him if, after all this agonized thinking, the maid were surprised by a dry bed.

This idea would make no sense to him and he would become so confused and bewildered by it that he would be unable to straighten out his mind. Instead, the idea would run through his mind constantly and soon he would find himself miserably, helplessly and confusedly speculating about his shame, anxiety and embarrassment when the maid discovered the dry bed instead of the wet bed he had planned. This thinking would so trouble him that finally, in desperation, he would become so sleepy that he would welcome going to bed because, try as he might, he would not be able to think clearly.

Then the next morning, his first reaction would be one of abject fear of remaining in the room while the maid discovered the *dry* bed. He would search his mind frantically for some excuse to leave and fail, and have to stare wretchedly out of the window so that she would not see his distress.

The next day, beginning in the afternoon, the same bewildered, confused thinking would recur with the same results, and the third day would be another repetition of the same.*

He was further told that, upon checking out of the hotel after the third night, he would find himself greatly torn by a conflict about visiting his grandparents. The problem of whether he should visit the maternal or the paternal set of grandparents first would be an agonizing obsessional thought. This he would finally resolve by making the visit to the first set one day shorter than that to the second. Once arrived at his destination, he would be most comfortable and would look forward happily to visiting all of his relatives. Nevertheless, he would be obsessed with doubts about which to visit next, but always he would enjoy a stay of several days.

All of these suggestions were repetitiously reiterated in an effort to insure the implantation of these pseudo-problems in order to redirect his enuretic fears and anxieties and transform them into anxieties about visits with relatives instead of anxiety about a wet bed for his closest relative, his mother.

He was dismissed after approximately two hours' work with a post-hypnotic suggestion for a comprehensive amnesia. Upon awakening, he was told briefly that he would be recalled in about three months and that he would undoubtedly be accepted for military service then.

Ten weeks later, he was seen again by the writer as the consultant for the local draft board. He reported in detail his "amazing experience" at the hotel with no apparent conscious awareness of what had occasioned it. He explained that he "almost went crazy in that hotel trying to wet that bed but I couldn't do it. I even drank water to be sure but it didn't work. Then I got so scared I pulled out and started to visit all my relatives. That made me feel all right, except for being scared to death about which one to see first, and now I'm here."

*The rationale of the three nights was this: if the plan was effective, the first night would be one of doubt and uncertainty, the second one of certainty, and the third would bridge a transition from bed-wetting anxiety to another anxiety situation.

He was reminded of his original complaints. With startled surprise, he replied, "I haven't done that since I went crazy in the hotel. What happened?" Reply was made simply that what had happened was that he had stopped wetting the bed and now could enjoy a dry bed. Two weeks later, he was seen again at the induction center at which time he was readily accepted for service. His only apparent anxiety was concern about his mother's adjustment to his military service.

Patient D

A selectee, greatly interested in entering military service, disclosed upon psychiatric examination a rather serious, closely circumscribed neurosis which embarrassed him tremendously. His difficulty lay in the fact that he was unable to urinate unless he did so by applying an 8" or 10" wooden or iron pipe to the head of the penis, thus urinating through the tube.

Since he seemed to be reasonably well-adjusted in all other regards and had a good work and social history, the conclusion was reached that he might be amenable to brief hypnotherapy.

His history disclosed that, as a small boy, he had urinated through a knothole in a wooden fence bordering a golf course. He was apprehended from in front and behind and was severely punished, embarrassed and humiliated. His reaction had been one of a repetition compulsion, which he had solved by securing a number of metal or wooden tubes. These he had carried with him constantly. He gave his story frankly and fully, though much embarrassed by it. A deep trance was readily induced and the history already given was confirmed. His attitude toward military service was found to be good and he was actually willing to enter military service with his handicap, provided it occasioned him no significant embarrassment.

A long, detailed explanation in the form of post-hypnotic suggestions was given to him about how this could be done. He was urged to secure a length of bamboo 12" long* and to mark it on the outside in quarter inches and to use that in urinating. This he was to hold with his thumb and forefinger, alternately with the right and left hand as convenient, and to flex the other three fingers around the shaft of the penis. Additionally, he was instructed to try with his thumb and forefinger to sense the passage of urine through the bamboo. No actual mention was made of feeling the passage of urine through the urethra with the other fingers. He was also told that in a day or two, or a week or two, he might consider how long the bamboo needed to be and whether or not he could saw off one quarter, one half or even one inch, but that he need not feel compelled to do so. Rather, he should let any reduction in the length of the bamboo come about easily and comfortably, and he should be interested only in wondering on what day of the week he might reduce the length of bamboo. He was also told to be most certain to have the three fingers grasping the shaft of the penis so that he could notice better the flow of urine through the bamboo. As for military service, he would be rejected at the present, but arrangements would be made to have him called up in three months' time for a special psychiatric examination. At that time, he would undoubtedly be accepted.

*A tube definitely longer than those he had been using was suggested. His acceptance of the longer tube constituted a reality acknowledgment that the writer could do something about the tube, namely, make it longer. *Equally significant* is the unrecognized implication that the writer could make it shorter. Additionally, the tube was neither wood nor iron, it was bamboo. Thus, in essence, three transformation processes, longer, shorter and material, had been initiated.

The interview was closed with two final post-hypnotic suggestions. The first was directed to a total amnesia for the entire trance experience. The other was concerned with the securing and preparation of the bamboo with no conscious understanding of the purpose.

About three months later, his local draft board sent him for a special psychiatric examination to the writer, the consulting psychiatrist for that draft board. The young man was surprised and delighted. He explained that he had obeyed instructions, that he had been greatly astonished and bewildered to find himself buying the bamboo and then much embarrassed by the sudden rush of memories. At first distressed by his violation of the amnesia instructions, he soon began to develop a tremendous sense of hope and belief that he would solve his problem. He practiced urinating with the bamboo tube for about a week and then reached the conclusion that he could saw off about one half inch and was much puzzled when he actually sawed off a full inch. This pleased him greatly and he wondered when he would saw off some more and he realized suddenly that it would occur on a Thursday (why Thursday could not be explained). On that occasion, he sawed off two inches and a few days later another inch. At the end of the month he had a quarter inch ring of bamboo left. While using it one day, he realized that the flexion of the three fingers around the shaft of the penis gave him a natural tube. Therefore, he discarded the remains of the original bamboo and took great delight in urinating freely and comfortably. He did so with both the right and left hand and even experimented by extending the little finger and then realized that he could urinate freely without resort to any special measure. He was then taken to the lavatory and asked to demonstrate. He immediately raised the question, "Where are you going to stand? Behind me?" Thereupon he laughed and said, "This is not a board fence. That belongs in my past history. You can stand where you want. It makes no difference to me."

A week later, he was called up for induction. He was amused by his past difficulties and wondered why he had not had "enough brains" to figure out his particular problem by himself. He was assured that people usually do not know how to handle such simple things, that they have difficulty because of trying too hard. The total duration of the therapeutic trance, somnambulistic in character, was less than an hour.

The entire procedure and its outcome demonstrate the ease and effectiveness with which symptomatology can be utilized to secure a transformation of a neurotic problem. The incapacitating wooden or metal tube was transformed into bamboo, then into the cylinder formed by the middle, third and little finger and then into the tube constituted by the phallus.

COMMENT

IN BOTH OF THESE PATIENTS, anxiety, precipitated by unhappy reactions of other people, existed in relation to a natural function. Therapy was accomplished by systematically utilizing this anxiety through a process of redirecting and transforming it. By thoroughly confusing and distracting Patient C, his anxiety about a wet bed was transformed into anxiety about a dry bed. Then his anxiety about his wet bed-home relationships was transformed into anxiety about relatives. The final transformation became that of his mother's anxiety about his military service.

For Patient D, the transformation of anxiety progressed from: kind of tube; to

sensing the passage of urine; to the shortening of the tube; to the question of the day for shortening the tube; and finally, into the unimportant question of where the writer would stand.

For both patients, the utilization of anxiety by a continuance and a transformation of it provided for a therapeutic resolution into a normal emotion permitting a normal adjustment, known to have continued for nine months while in service. Contact was then lost.

SYMPTOM AMELIORATION

NOT INFREQUENTLY IN NEUROTIC DIFFICULTIES, there is a surrender of the personality to an overwhelming symptom-complex formation, which may actually be out of proportion to the maladjustment problem. In such instances, therapy is difficult since the involvement of the patient in his symptomatology precludes accessibility. In such cases, a technique of symptom amelioration may be of value. In the two following cases, an overwhelming, all-absorbing symptom-complex existed; therapy had to be based upon an apparently complete acceptance of the symptoms and then was achieved by ameliorating the symptoms.

Patient E

A 17 year old feeble-minded boy adjusted poorly when sent to a training school for delinquents. Within a month, he had developed a rapidly alternating flexion and extension of the right arm in the horizontal plane at the cardiac level. Then he was seen some six weeks later in the hospital, a diagnosis of a hysterical reaction had been made probably on the basis of masturbation fears and his maladjustment in the training school. Physical examination disclosed a glove anesthesia extending up to the elbow of the right arm and rapid (135 times a minute) flexion and extension of that arm. Both the anesthesia and the muscular activity disappeared during physiological sleep and reappeared upon awakening. Because of his low intelligence (I.Q. 65), efforts at psychotherapy proved futile and hypnotherapy was suggested.

Hypnosis was employed in daily sessions for three weeks before a sustained trance could be obtained. Although he went into a trance readily, he would immediately drift into physiological sleep and would have to be awakened and a new trance induced. Finally, by the measure of hypnotizing him in the standing position and walking him back and forth, a prolonged trance could be secured. The trance state, however, had no effect upon his symptoms.

Efforts made to reduce the frequency of his arm movements were unsuccessful. His only response was "Can't stop. Can't stop." Similarly, efforts to discuss his problem or to elicit information failed. His communications were in essence, "My arm, my arm, I can't stop it."

After daily sessions for a week, during which an interne ostentatiously made repeated counts of the movements per minute, a new technique was devised: it was suggested that the rate would be increased from 135 to 145 per minute and that this increased rate would persist until the patient was seen again. The next day the suggestion was offered that it would decrease to the usual 135 until seen again. Again it was increased to 145 and again decreased to 135. After several such repetitions, with the count repeatedly checked by the interne and found to be approximately correct, further progress was made by suggesting alternating incre-

ments and decrements, of 5 and 10 points respectively in the rate of the arm movement. This was continued day after day until a rate of 10 per minute was reached. Then the technique was reversed to increase the rate to 50 movements per minute. Again it was reduced to a rate of 10 per minute. It was suggested that this rate would continue for a few days, drop to 5 per minute and then "increase" to 20 or 30 or more a day. A few days later, the rate shifted from 5 per minute to scattered isolated movements per day. The patient himself kept count of these, the daily total ranging around 25. Next the suggestion was given that this count would diminish day by day until it was around 5, and then it would "increase to as high as 25 times a week." The patient responded as suggested and then he was asked to "guess on what day" there would be no uncontrolled movements. Shortly he "guessed" the day when no movements would occur and demonstrated the correctness of his conjecture.

Further "guessing" on the patient's part led within a few days to his demonstration that he was free of his disability and was continuing so. During the process of diminishing the arm movement symptom, a parallel behavior of the glove anesthesia was noted. It waxed and waned in direct relation to the arm activity and vanished along with that symptom.

A month later, the patient was returned to the training school and intentionally assigned to the task of kneading bread dough by hand in the institutional bakery. A year later, he was still adjusting satisfactorily.

Patient F

A mental hospital employee was referred to the writer because of sudden acute blindness which had developed on his way to work. He was led into the office in a most frightened state of mind. Hesitantly and fearfully, he told of having eaten breakfast that morning, laughing and joking with his wife, and of suddenly becoming extremely disturbed by some risqué story she related. He had angrily left the house and decided to walk to work instead of taking the bus as was his usual custom. As he rounded a certain street corner, he suddenly became blind. He had developed a wild panic and a friend passing along the highway in a car had picked him up and brought him to the hospital. The ophthalmologist had examined him immediately and then referred him to the writer. The man was much too frightened to give an adequate history. He did state that he and his wife had been quarreling a great deal recently; she had been drinking at home and he had found hidden bottles of liquor. She had vigorously denied drinking.

When asked what he was thinking about as he left the house, he explained that he was much absorbed in his anger at his wife, feeling that she should not be telling off-color stories. He had a vague feeling of apprehension, believing that he might be heading for the divorce court.

He was asked to trace his steps mentally from his home up to the point of the sudden onset of his blindness. He blocked mentally on this. He was asked to describe that particular street corner and his reply was that, although he had walked around it many, many times, he could not remember anything about it, that his mind was a total blank.

Since the street corner involved was well known to the writer, various leading questions were asked without eliciting any material from him. He was then asked to describe exactly how the blindness had developed. He stated that there had occurred a sudden flash of intense redness, as if he were staring directly into a hot,

red sun. This redness still persisted. Instead of seeing darkness or blackness, he saw nothing but a brilliant, blinding saturated red color. He was oppressed by a horrible feeling that he would never be able to see anything but an intense glaring red for the rest of his life. With this communication the patient became so hysterically excited that it was necessary to sedate him and put him to bed.

Next the patient's wife was summoned to the hospital. With much difficulty and after many protestations of unfailing love for her husband, she finally confirmed his account of her alcoholism. She refused to relate the story that had precipitated the quarrel, merely stating that it had been a risqué story about a man and a red-headed girl which had really meant nothing.

She was told where her husband had developed his sudden blindness and asked what she knew about the street corner. After much hedging, she recalled that there was a service station on the opposite side of the street. This she and her husband often patronized in buying gas for their car. After still further insistent questioning, she remembered a service station attendant there who had brilliant red hair. Then finally, after many reassurances, she confessed to an affair with that attendant who was commonly known as "Red." On several occasions, he had made unduly familiar remarks to her in her husband's presence which had been intensely resented. After much serious thinking, she declared her intention to break off the affair if the writer would cure her husband of his blindness, and demanded professional secrecy for her confidences. Her husband's unconscious awareness of the situation was pointed out to her and she was told that any further betrayal would depend entirely upon her own actions.

When the patient was seen the next day, he was still unable to give any additional information. Efforts were made to assure him of the temporary nature of his blindness. This reassurance, he was most unwilling to accept. He demanded that arrangements be made to send him to a school for the blind. With difficulty, he was persuaded to accept therapy on a trial basis, but on the condition that nothing be done about his vision. When he finally consented, hypnosis was suggested as an appropriate, effective therapy for his purposes. He immediately asked if he would know what happened if he were in a trance. He was told that such knowledge could remain only in his unconscious, if he so wished, and thus would not occasion him trouble in the waking state.

A deep trance was readily induced, but the patient at first refused to open his eyes or test his vision in any way. However, further explanation of the unconscious mind, amnesia and post-hypnotic suggestions induced him to recover his vision in the trance state. He was shown the writer's bookplate and instructed to memorize it thoroughly. This done, he was to awaken, again blind, and with no conscious knowledge of having seen the bookplate. Nevertheless he would, upon a post-hypnotic cue, describe it adequately to his own bewilderment. As soon as he understood, he was awakened and a desultory conversation begun. This he interrupted upon the post-hypnotic signal to give a full description of the bookplate. He was tremendously puzzled by this since he knew he had never seen it. Confirmation of his description by others served to give him a great but mystified confidence in the therapeutic situation.

Following rehypnosis, he expressed complete satisfaction with what had been done and a full willingness to cooperate in every way. Asked if this meant he would confide fully in the writer, he hesitated, and then determinedly declared that it did.

Special inquiry among his fellow workers on the previous day had disclosed him to have a special interest in a red-haired female employee. By gentle degrees, the question of this interest was raised. After some hesitation, he finally gave a full account. Asked what his wife would think of it, he defensively asserted that she was no better than he, and asked that the matter be kept in confidence. Immediately, the questioning was shifted to a description of the street corner. He described it slowly and carefully but left mention of the gas station to the last. In a fragmentary fashion he described this, finally mentioning his suspicions about his wife and the redhaired attendant. He was asked if his suspicions began at the time of his own interest in the redhaired girl and what did he think he wanted to do about the entire situation.

Thoughtfully he declared that, whatever had happened, both he and his wife were equally guilty since neither had endeavored to establish a community of interests.

Inquiry was then made about his wishes concerning his vision. He expressed fear of recovering it immediately. He asked if the "horrible, bright redness" could be made less glaring, with now and then brief flashes of vision which would become progressively more frequent and more prolonged until finally there was a full restoration. He was assured that everything would occur as he wished, and a whole series of appropriate suggestions was given.

He was sent home on sick leave but returned daily for hypnosis accompanied by his wife. These interviews were limited to a reinforcement of the therapeutic suggestions of slow, progressive, visual improvement. About a week later, he reported that his vision was sufficiently improved to permit a return to work.

Six months later, he returned to report that he and his wife had reached an amicable agreement for a divorce. She was leaving for her home state and he had no immediate plans for the future. His interest in the redhaired girl had vanished. He continued at his work uneventfully for another two years and then sought employment elsewhere.

COMMENT

THE PROCEDURE with these two patients was essentially the same. The underlying causation was not therapeutically considered. Patient E's intellectual limitations precluded this and Patient F had demonstrated the violence of his unwillingness to face his problem. Hence, for both, an amelioration of the overwhelming symptom formation was effected. By a process of alternating increments and decrements a control of E's symptom complex was brought about and for Patient F the reduction of the blinding redness, permission to remain blind and yet to have progressively more frequent and clearer flashes of vision served as a parallel procedure. As a consequence of the amelioration of their symptoms, both patients subsequently were enabled to make their own satisfactory personal adjustments.

CORRECTIVE EMOTIONAL RESPONSE

THE FOLLOWING CASE HISTORIES concern intensely emotional problems. Therapy was achieved in one case by a deliberate correction of immediate emotional responses without rejecting them and the utilization of time to palliate and to

force a correction of the problem by the intensity of the emotional reaction to its definition.

For the second patient, the procedure was the deliberate development at a near conscious level, of an immediately stronger emotion in a situation compelling an emotional response corrective, in turn, upon the actual problem.

Patient G

An attractive social service student at the hospital entered the writer's office one evening without an appointment. She was clad in scanty shorts and a halter and sprawled out in the armchair declaring, "I want something." Reply was made, "Obviously so, or you would not be in a psychiatrist's office." Coquettishly, she expressed doubt about wanting psychotherapy and was informed that an actual desire was necessary for therapeutic results.

After some silent thinking, she declared that she needed and wanted psychotherapy; she would state her problem and then the writer could decide if he were willing to have her as a patient. She expressed the belief that upon hearing her problem, he would probably eject her from the office.

She then plunged into her story: "I have a prostitution complex--for the past three years, I want to go to bed with every man I see. Most of them are willing. It doesn't make any difference what they are or who they are, drunk or sober, old or young, dirty or clean, any race, anything that can look like a man. I take them singly, in groups, any time, any place. I'm disgusting filthy horrible. But I've got to keep on doing it and I want to stop. Can you help me or should I go?"

She was asked if she could control her activities until the next session. Her reply was, "If you'll take me as a patient, I won't do anything tonight. But I will have to give you a new promise in the morning and another at night and keep that up every day until I'm over it." She was told that she could have the next three days to test her sincerity. For those three days, she reported twice daily at the office to renew her promises. This promise renewal became a routine for her.

During a three-hour session on the fourth day, the patient devoted herself to an intense verbal self-flagellation by recounting in full detail first one and another of her experiences. With extreme difficulty, she was induced to give such facts as her full name, birthdate, home address, etc. Only by constant interruption of her accounts was it possible to secure the following limited additional history: Her mother was a "shallow-minded social climber, a complete snob, who is peaches and cream to those she thinks useful and a back-biting cat to everybody else. She rules my father and me by shrill shrieking. I hate her." Her father was a "big business man, a nice guy with plenty of money, means well, I love him, but he's nothing but a dirty, stinking grease-spot under my mother's thumb. I'd like to make a man out of him so he'd slap her down." Both parents taught her to "hate sex, it's nasty they say, and they haven't ever to my knowledge slept in the same bedroom. I'm the only child. I hate sex and it should be beautiful." With that, she launched into a continuance of her verbal self-flagellation for the rest of the session.

The next three-hour session was equally futile. She devoted herself, despite numerous attempts at interruption, to a bitter, morbid, repetitious account of her experiences.

At the following session, as she entered the office, she was told emphatically, "Sit down, shut up, and don't you dare to open your mouth!" Peremptorily, she was told that the writer would thenceforth take charge of all interviews, no more time would be wasted, the course of therapy would be dictated completely by the writer, and she was to express her agreement by nodding her head and keeping her mouth shut. This she did.

Thereupon, with little effort, a deep somnambulistic trance was induced and she was told that henceforth she would have an amnesia for trance experiences unless otherwise indicated by the writer. Despite the trance, she was found to be no more accessible than in the waking state, with one exception: she did not speak unless so instructed, but when she did talk, it was exclusively on the subject of her affairs. No further history could be obtained. Efforts to circumvent her compulsive narration by disorientation, crystal gazing, automatic writing and depersonalization resulted only in more specific, detailed accounts.

At the next session, in a deep, somnambulistic trance she was instructed emphatically: "We both want to know why you are so promiscuous. We both want to know the cause of your behavior. *We both know that that knowledge is in your unconscious mind.* For the next two hours, you will sit quietly here thinking of nothing, doing nothing, just knowing that your unconscious is going to tell you and me the reason for your behavior. *It will tell the reason clearly and understandably, but neither you nor I will understand until the right time comes, and not until then.* You don't know how your unconscious will tell. I won't know what it tells until after you do, but then I will learn the reason too. At the right time, in the right way, you will know and I will know. Then you will be all right."

At the end of two hours, she was told that the time had come for her unconscious to tell the reason. Before she had time to get frightened, she was handed a typewritten sheet of discarded manuscript. She was then told: "Look at this—it's a typewritten page: words, syllables, letters. Don't read it—just look at it. The reason is there—all the letters of the alphabet are there and they spell the reason. You can't see it—I can't see it. In a minute, I'm going to lock that sheet up in my desk with the reason unread. When the time comes, you can read it, but not until then. Now put the sheet face up on the desk, take this pencil, and in a random fashion, in a scrambled fashion, *underline those letters, syllables, words that tell the reason—quickly.*"

In a puzzled manner, she rapidly made nine scattered underlinings while the writer, on another sheet, made a numerical notation of the relative positions of the underlinings. Immediately, the sheet was taken from her and locked up face down in a desk drawer.

Then she was told, "Only one thing remains to be done. That is to decide the time when the reason is to be fully known. Come back and tell me tomorrow. Now wake up." Upon awakening, she was given an appointment for the next day and dismissed. She took her departure without giving her usual promise.

The next morning, she again failed to appear to give her promise. However, she kept her late afternoon appointment, explaining, "I almost didn't come because I have only two silly words to say. I don't even know if I'll keep any more appointments with you. Well, anyway, I'll say the two words—I'll feel better—'Three weeks.' "

The reply was made, "According to the calendar, that would be 4:00 o'clock August the 15th." She answered, "I don't know." Thereupon, using a post

hypnotic cue, a deep trance was induced. She was asked if she had anything to say. She nodded her head. Told to say it, she uttered, "Three weeks, August 15th, 4:00 o'clock." She was awakened and asked when she wanted another appointment. Her reply was that she would like to discuss her plans for the coming year and a possible thesis she might write.

For the next three weeks, she was seen irregularly for discussion of her scholastic plans and extracurricular reading. There was no discussion of her problem nor did she make any more promises.

During that three weeks, she attended a party where a personable young man, newly arrived at the hospital and an advisee of the writer, attempted to seduce her. She laughed at him and gave him the choice of informing the writer of his misbehavior or having her relate it and succeeded in so intimidating him that he confessed.

At 4:00 p.m., August 15th, she entered the office, remarking, "It's 4 o'clock, August the 15th. I don't know why I'm here, but I had a strong feeling that I had to come. I wanted to and I didn't want to. There is something awfully scary about coming. I wish I didn't have to."

She was answered, "You first came to me for therapy. Apparently you drifted away. Maybe so maybe not. Our sessions were usually three hours long. I used hypnosis. Shall I hypnotize you or can you finish therapy in the waking state? Just remember both our conscious and you unconscious mind are present. If you want to go to sleep, you can. But at all events, sit down in that chair, be quiet, and at the end of an hour, name a time by saying, 'I'll be ready at . . .' and give a specific time."

Uncomprehendingly, she sat down and waited awake. At 5:00 o'clock she remarked, "I'll be ready at 6:30," and continued to wait quietly in a puzzled fashion.

At 6:30, the desk drawer was unlocked and the sheet of paper handed to her. She turned it over and around in a puzzled fashion, scrutinized the underlinings, suddenly paled, became rigid, gave voice to an inarticulate cry, and burst into choking, shuddering sobs, gasping repeatedly, "That's what I tried to do."

Finally, in better control of herself, she said, "The reason is here—read it."

The underlined material read:

i	wa	nt	to	f	uc	K	f	author*
---	----	----	----	---	----	---	---	---------

*The actual numerical order of the underlining was:

1. to

2. I

3. nt

4. wa

5. uc

6. f

7. K

8. f

9. author, with a line joining 8 and 9.

She explained, "It was any man, every man, all the men in the world. That would include father. That would make him a man, not a grease spot under my mother's thumb. Now I know what I have been trying to do and I don't have to any more. How horrible!"

She reacted with further intense sobbing but finally declared, "That's all in the past now. What can I do?"

The suggestion was offered that she undergo a complete physical examination to check the possibility of venereal disease. To this she agreed.

She completed her next year's training successfully and was not heard from until several years later. Then it was learned from a colleague that she was most happily married and is the mother of three children. Subsequent personal inquiry confirmed the happiness of her marriage.

COMMENT

THE MANAGEMENT of this case was essentially that of a strong dictatorial father handling a "bad" child. The patient's initial seductive overture towards the writer was immediately corrected through a carefully chosen reply, without thereby nullifying her underlying emotional transference. Her contempt for her father was corrected by accepting her identification of the writer as a father-surrogate, exercising absolute dictatorial authority over her, and continuing this throughout the treatment situation.

The tremendously strong compelling feelings deriving from her problem were corrected by the experiences of the waiting period. By underlining the words of the manuscript sheet, the patient was made to write down in black and white the reason for her neurotic behavior. Although still consciously unknown to her, it was thereby made *unavoidably knowable* by virtue of its written character. She was thus given three weeks in which to adjust to the change from "unavoidably unknown" to "unavoidably knowable." During this period, the patient maneuvered the seduction scene with the writer's advisee whom she then forced to confess his "incestuous" attempt (they were *both* advisees of the writer!).

The unknown made knowable for all to know, the terror-stricken confession of incest by proxy, the three weeks of unwitting resignation to the inevitable—these were the corrective emotional elements which culminated in the distressing, painful emotionality of the final session.

Patient H

A young man, normally weighing 170 pounds, married a voluptuously beautiful girl and his friends made many ribald jests about his impending loss of weight.

Nine months later, he sought psychiatric advice from the writer because of two problems. One was that he no longer could tolerate his fellow-workers jesting about his weight loss of over 40 pounds. More hesitantly, he added that the real problem was something else entirely, namely the failure to consummate the marriage.

He explained that his wife promised each night to permit consummation, but at his first move, she would develop a severe panic and would fearfully and piteously persuade him to wait until the morrow. Each night, he would sleep restlessly, feeling intensely desirous and hopelessly frustrated. Recently, he had become greatly frightened by his failure to have an erection despite his increased sexual hunger.

He asked if there could be any help for either himself or his wife. He was reassured and an appointment was made for his wife. He was asked to tell her the reason for the consultation and to ask her to be prepared to discuss her sexual development since puberty.

The couple arrived promptly for an evening appointment and the husband was dismissed from the room. She told her story freely though with much embarrassment. She explained her behavior as the result of an uncontrollable, overpowering terror which she vaguely related to moral and religious teachings. Concerning her sexual history, she exhibited a notebook in which the date and hour of onset of every menstrual period had been recorded neatly.

Examination of this amazing record disclosed that, for ten years, she had menstruated every 33 days, and that the onset was almost invariably around 10 or 11 a.m. There were a few periods not on the scheduled date. None of these was early. Instead, there were occasional delayed periods, recorded by actual date and with the scheduled date marked by an explanatory note such as, "Been sick in bed with bad cold." It was noted that her next period was not due for 17 days. When asked if she wanted help with her marital problem, she first declared that she did. Immediately, however, she became tremendously frightened, and sobbingly with much trembling begged the writer to let her "wait until tomorrow." She was finally quieted by the repeated assurance that she would have to make her own decision.

As the next measure, she was given a long, vague, general discourse upon marital relations, interspersed more and more frequently with suggestions of fatigue, disinterestedness and sleepiness until a fairly good trance state had been induced.

Then, accompanied by emphatic commands to insure continuance of the trance, a whole series of suggestions was given insistently and with increasing intensity. These were to the effect that she might, even probably would, surprise herself by losing forever her fear by suddenly, unexpectedly, keeping her promise of tomorrow sooner than she thought. Also, that all the way home she would be completely absorbed with a satisfying but meaningless thought that she would make things happen too fast for even a thought of fear. Her husband was seen separately and assured of a successful outcome for the night.

The next morning, he reported ruefully that halfway home, 17 days too early, her menstrual period began. He was relieved and comforted by the specious statement that this signified the intensity of her desire and her absolute intention to consummate the marriage. He was given another appointment for her when her period was over.

She was seen again on a Saturday evening. Again a trance was induced. This time the explanation was given her that a consummation must occur, and that the writer felt that it should occur within the next ten days. Furthermore, she herself should decide when. She was told that it could be on that Saturday night or Sunday although the writer preferred Friday night; or it could be on Monday or Tuesday night, although Friday was the preferred night; then again, it could be Thursday night but the writer definitely preferred Friday. This listing of all the days of the week with emphasis about the writer's preference for Friday was systematically repeated until she began to show marked annoyance.

She was awakened and the same statements were repeated. Her facial expression was one of intense dislike at each mention of the writer's preference. The husband was seen separately and told to make no advances, to be passive in his behavior, but to hold himself in readiness to respond, and that a successful outcome was certain.

The following Friday he reported, "She told me to tell you what happened last night. It happened so quick I never had a chance. She practically raped me. And

she woke me up before midnight to do it again. Then this morning she was laughing and when I asked her why, she told me to tell you that it wasn't Friday. I told her it was Friday and she just laughed and said you would understand that it wasn't Friday." No explanation was given to him.

The subsequent outcome was a continued happy marital adjustment, the purchase of a home, and the birth of three wanted children at two-year intervals.

COMMENT

THE PSYCHOSOMATIC RESPONSE of a menstrual period 17 days early in so sexually rigid a woman is a remarkable illustration of the intensity and effectiveness with which the body can provide defenses for psychological reasons.

The rationale of the ten-day period, the naming of the days of the week, and the emphasis on the writer's preference was as follows: ten days was a sufficiently long period in which to make her decision and this length of time was, in effect, reduced to seven days by naming them. The emphasis upon the writer's preference posed a most compelling, unpleasant emotional problem for her: since all the days of the week had been named, the passage of each day brought her closer and closer to the unacceptable day of the writer's preference. Hence, by Thursday only that day and Friday remained; Saturday, Sunday, Monday, Tuesday and Wednesday had all been rejected. Therefore consummation had to occur either on Thursday by her choice or on Friday through the writer's choice.

The procedure employed in the first interview was obviously wrong, but fortunately it was beautifully utilized by the patient to continue her neurotic behavior and to punish and frustrate the writer for his incompetence. The second interview was more fortunate. A dilemma she could not recognize of two alternatives was created for her—the day of her choice or of the writer's preference. The repeated emphasis upon the latter evoked a strong corrective emotional response: the immediate need to punish and frustrate the writer temporarily transcended her other emotional needs. The consummation effected, she could then taunt the writer with the declaration that last night was not Friday, happily secure that he would understand. The resolution of this emotional problem, substantiated by the therapeutic results, was thus integral to and contingent upon an emotional response of corrective effect.

SUMMARY

THE PURPOSE OF PSYCHOTHERAPY should be to help the patient in the most adequate, available and acceptable fashion. In rendering him aid, there should be full respect for and utilization of whatever the patient presents. Emphasis should be placed more on what the patient does in the present and will do in the future than on a mere understanding of why some long-past event occurred. The *sine qua non* of psychotherapy should be the present and the future adjustment of the patient with only that amount of attention to the past necessary to prevent a continuation or a recurrence of past maladjustments.

Why Patient H refused to permit a consummation of the marriage is of interest only to others, not to her—she is too happy with her children, her marriage, her home to give even a passing, backward glance at the possible causation of her behavior. To assume that the original maladjustment must necessarily come from

again in some disturbing form is to assume that good learnings have neither intrinsic weight nor enduring qualities, and that the only persisting forces in life are the errors.

As an analogy, whatever may be the psychogenic causation and motivation of arithmetical errors in grade school, an ignorance thereof does not necessarily preclude mathematical proficiency in college. If mathematical ineptitude does persist, who shall say that a potential concert violinist must properly understand the basic reasons for his difficulties in the extrapolation of logarithms before entering upon his musical career?

The above case histories have been cited to show that the purposes and procedures of psychotherapy should involve the acceptance of what the patient represents and presents. This should be utilized to give the patient impetus and momentum so as to make his present and future become absorbing, constructive and satisfying.

It is essential that the therapist understand the patient's past, as fully as possible, without compelling him to achieve the same degree of special erudition. It is out of the therapist's understandings of the patient's past that better and more adequate ways are derived to help the patient to live his future. In this way, the patient does not become isolated as a neurosis of long duration to be dissected bit by bit, but can be recognized as a living, sentient human being with a present and a future as well as a past.

APPENDIX

THERE ARE MANY VARIATIONS of the technique used in the case of Patient G that are often useful in expediting therapy. They are employed by impressing most carefully and emphatically upon the patient the idea that his unconscious mind can and will communicate highly important, even inaccessible, information central to his problem, but not necessarily in an immediately recognizable form. Then, as a result of some concrete or tangible performance, the patient develops a profound feeling that the repressive barriers have been broken, that the resistances have been overcome, that the communication is actually understandable and that its meaning can no longer be kept at a symbolic level.

Essentially, the procedure is a direct clinical utilization of projective test methodology with the patient's performance committing him decisively to a direct, relatively immediate understanding. The task need not be deliberately assigned. The patient may be asked to do some apparently meaningless thing of his choice. Or, as in the above case history, he may be asked to execute some definite performance.

Thus the writing of a deliberately false description of some casual event may be assigned as a task:

"I don't think we are getting anywhere—there is nothing on my mind. I can't talk; I can't think. There is nothing I can tell you."

The above was a familiar refrain from a patient. He was taken at his word and asked: "Anything happen since your last appointment?"

"Nothing—I was supposed to go to an office party. I just opened the door, looked in and left. I can't talk. My mind is just a blank."

"Fine—now let your unconscious work. Here is a pencil and a pad of paper. Write a false description of the people at the party."

"But I don't even know who was at the party."

"Good, that makes it easier to write a false description."

The patient then proceeded to write out 15 accounts of people at that party who had untidy, straight black hair and unduly long noses. He did so without any awareness that he was repeating each time the same characteristics of the hair and nose. These were pointed out to him and the insistent request made that he sketch the hair and nose, which he obediently did.

Then he was told to name the sketch quickly by writing the name under it. Puzzled, he said slowly, "Name it, like Louise, Mary" and as he made this reply, his hand wrote: "Mother." Becoming aware of this, he yelled, "But her name was Mary Louise and she died when I was six and I hated her!" That is where therapy began and resistance ceased.

A further instance is that of a woman suffering from psychogenic asthma whose therapy had reached a standstill. The patient had been full of praises for her father, whom she loved dutifully. The writer also had become a father figure for her. She was told to write an "unreasonable" letter quickly without thinking. She handed over to be read a letter to her father filled with unreasonable complaints and hostility—and developed an immediate, severe asthmatic attack. This episode led to a turning point in her treatment and a subsequent freedom from asthma now of nine years' duration.

Another patient was asked, "Do something unexpected, unplanned, but completely meaningful to you and to me in this situation. Do it right now, no matter how silly." She looked vaguely, helplessly around the office and noticed a cartoon another patient had left of a harried mother and her brood. She then offered, "I'll count the people in that cartoon." As she did so, there was an oversight of one of the children in the picture, followed shortly by the spontaneous, unexpected expression of secret doubts about the paternity of one of her own children.

Examples of some of the other variations which have been employed by the writer are:

1. The "random" selection from a shelf of a book or books and thereby unwittingly designating a meaningful title.
2. The checking of dates on a calendar—in one instance a highly important "forgotten" street address; in another, the age at which a strongly repressed traumatic experience occurred.
3. The writing of a series of casual sentences with a misspelled word, a misplaced word or varied spacing of words in one or more sentences.
4. The writing of a "silly" question—seeking instruction preparatory for marriage to George, she wrote, "Will I marry Harold?" who was known to her only as a casual acquaintance of a friend. She actually married a man named Harry.
5. Scrawling at random on paper, shading a line here and there and subsequently "finding the lines that make a picture."
6. Drawing a series of related or unrelated pictures, smudging or crossing one or more partially or completely—the people on the street; with the old man thoroughly smudged and his recognition of his mother-hostility.
7. Writing a list of casual words and "underlining one or more which would be or should be difficult or impossible to talk about"—the list was one of various items observed while walking down the street with the one word "flowers" repetitiously included but not underlined—his repressed fears of being a latent "pansy."
8. Tearing out an uninteresting advertisement from some magazine and bring

it to the next session—a picture of doughnuts and his sudden realization of the extent of his loss of interest in his wife.

9. Picking up and handing over something, just anything—in one instance a pencil stub: phallic inferiority; in another, a burning match: fear of beginning impotence.

10. Glancing briefly at each page in a newspaper. When this had been done, the additional instruction of, "Give a page number quickly"—the alimony story and secret fears about the marital situation.

11. "When you get up and move your chair to the other side of that table your unconscious mind will then release a lot of important information. Perhaps it will take your unconscious even longer than five or ten minutes to do it, or perhaps it will not be until the next session"—ten years ago giving mother one-half hour early her four-hour dose of tonic and mother's cardiac death five minutes later.

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Indirect Hypnotic Therapy of an Enuretic Couple*

A YOUNG COUPLE in their early 20's, much in love, married for a year and close friends of several of the writer's medical students at that time, sought psychiatric help. Their problem was one in common—life-long enuresis. During their 15-month courtship, neither had the courage to tell the other about the habitual enuresis. Their wedding night had been marked, after consummation of the marriage, by a feeling of horrible dread and then resigned desperation, followed by sleep. The next morning each was silently and profoundly grateful to the other for the unbelievable forbearance shown in making no comment about the wet bed.

This same silent ignoring of the wet bed continued to be manifested each morning for over nine months. The effect was an ever-increasing feeling of love and regard for each other because of the sympathetic silence shown.

Then one morning, neither could remember who made the remark, the comment was made that they really ought to have a baby to sleep with them so that it could be blamed for the wet bed. This led at once to the astonishing discovery for each that the other was enuretic and that each had felt solely responsible. While they were greatly relieved by this discovery, their enuresis persisted.

After a few more months, discreet inquiry of the medical students by the couple disclosed that the writer was a psychiatrist and a hypnotist and probably knew something about enuresis. Accordingly, they sought an appointment, expressed an unwillingness to be hypnotized and an incapacity to meet the financial obligations of therapy, but earnestly asked if they could be given help.

They were informed that they would be accepted as patients on a purely experimental basis and that their obligation would be either to benefit or to assume full financial responsibility for the time given them. To this they agreed. (This reversal of "cure me or I won't pay" is often most effective in experimental therapy).

They were then told that the absolute requisite for therapeutic benefits would lie in their unquestioning and unfailing obedience to the instructions given to them. This they promised.

The experimental therapeutic procedure was outlined to them, to their amazement and horror, in the following fashion:

"You are both very religious and you have both given me a promise you will keep. You have a transportation problem that makes it difficult to see me regularly for therapy. Your financial situation makes it practically impossible for you to see me frequently.

"You are to receive experimental therapy and you are obligated absolutely either to benefit or to pay me whatever fee I deem reasonable. Should you benefit, the success of my therapy will be my return for my effort and your gain. Should you not benefit, all I will receive for my effort is a fee and that will be a double loss to you but no more than an informative disappointment to me.

"This is what you are to do: Each evening you are to take fluids freely. Two

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hours before you go to bed, lock the bathroom door after drinking a glass of water. At bedtime, get into your pajamas and then kneel side by side on the bed, facing your pillows and deliberately, intentionally and jointly wet the bed. This may be hard to do, but you must do it. Then lie down and go to sleep, knowing full well that the wetting of the bed is over and done with for the night, that nothing can really make it noticeably wetter.

"Do this every night, no matter how much you hate it—you have promised though you did not know what the promise entailed, but you are obligated. Do it every night for two weeks, that is, until Sunday the 17th. On Sunday night, you may take a rest from this task. You may that night lie down and go to sleep in a dry bed.

"On Monday morning, the 18th, you will arise, throw back the covers, look at the bed. *Only as you see a wet bed, then and only then* will you realize that there will be before you another three weeks of kneeling and wetting the bed.

"You have your instructions. There is to be no discussion and no debating between you about this, just silence. There is to be only obedience, and you will then give me a full and amazing account. Goodby!"

Five weeks later, they entered the office, amused, chagrined, embarrassed, greatly pleased, but puzzled and uncertain about the writer's possible attitude and intentions.

They had been most obedient. The first night had been one of torture. They had to kneel for over an hour before they could urinate. Succeeding nights were desperately dreaded. Each night they looked forward with an increasing intensity of desire to lie down and sleep in a dry bed on Sunday the 17th.

On the morning of Monday the 18th, they awakened at the alarm, and were amazed to find the bed still dry. Both started to speak and immediately remembered the admonition of silence.

That night, in their pajamas, they looked at the bed, at each other, started to speak but again remembered the instructions about silence. Impulsively they "sneaked" into bed, turned off the reading light, wondering why they had not deliberately wet the bed but at the same time enjoying the comfort of a dry bed.

On Tuesday morning, the bed was again dry. That night and thereafter, Monday night's behavior had been repeated.

Having completed their report, they waited uncertainly for the writer's comments. They were immediately reminded that they had been told that they would give an "amazing account" in five weeks' time. Now they knew that they had, and that the writer was tremendously pleased, *and would continue to be pleased*, so what more could be asked?

After some minutes of carefully guided, desultory conversation, they were dismissed with the apparently irrelevant statement that *the next month was May*.

About the middle of May, they dropped in "spontaneously" to greet the writer and to report "incidentally" that everything was fine.

A year later, they introduced the writer to their infant son, amusedly stating that once more they could have a wet bed but only when they wished and it would be just "a cute little spot."

Hesitantly, they asked if the writer had employed hypnosis on them. They were answered with the statement that their own honesty and sincerity in doing what was necessary to help themselves entitled them to full credit for what had been accomplished.

To understand this case report, it might be well to keep in mind the small child's

frequent demonstration of the right to self-determination. For example, the child rebelling against the afternoon nap, fights sleep vigorously despite fatigue and will repeatedly get out of the crib. If each time, the child is gently placed back in the crib, it will often suddenly demonstrate its right by climbing out and immediately climbing back and falling asleep comfortably.

Concerning the evasive reply given to the patients about the use of hypnosis, by which they were compelled to assume fully their own responsibilities, the fact remains that the entire procedure was based upon an indirect use of hypnosis. The instructions were so worded as to compel without demanding the intent attention of the unconscious. The calculated vagueness of some of the instructions forced their unconscious minds to assume responsibility for their behavior. Consciously they could only wonder about their inexplicable situations, while they responded to it with corrective, unconscious reactions. Paradoxically, they were compelled by the nature of the instructions and the manner in which these were given to make a "free, spontaneous choice" of behavior and to act upon it in the right way without knowing that they had done so.

Favoring the therapeutic result was the prestige of the writer as a psychiatrist and a hypnotist well spoken of by their friends, the medical students. This undoubtedly rendered them unusually ready to accept indirect, hypnotic suggestion.

The rationale of the therapy may be stated briefly. Both patients had a distressing, life-long pattern of wetting the bed every night. For nine long months, both suffered intensely from an obvious but unacknowledged guilt. For another three months, they found their situation still unchanged.

Under therapy, during a subjectively never-ending two weeks, by their own actions, they acquired a lifetime supply of wet beds. Each wet bed compelled them to want desperately to lie down and sleep in a dry bed. When that opportunity came, they utilized it fully. Then, the next evening, understanding unconsciously but not consciously the instructions given them, they used their bed-wetting guilt to "sneak" into and enjoy a dry bed, a guilty pleasure they continued to enjoy for three weeks.

The uncertainty, doubt and guilt over their behavior vanished upon discovery at the second interview that they had really been obedient by being able to give the "full and amazing account." Yet, unnoticeably to them, the therapist's influence was vaguely but effectively continued by the seemingly irrelevant mention of the month of May.

Their final step was then to bring into reality a completely satisfactory solution of their own devising, a baby, the solution they had mentioned and which mention had led to an open acknowledgment of enuresis to each other. Then, at a symbolic level, they dismissed the writer as a therapist by introducing him to the infant, who, in turn, represented a happy and controllable solution to their problem. This they almost literally verbalized directly by their amused comment about having a wet bed any time they wished and that it would be only a pleasing thing of adult and parental significance.

Hypnotherapy of Two Psychosomatic Dental Problems*

IN THE PRACTICE OF PSYCHIATRY, one frequently encounters patients whose problems center around some physical attribute with which they are dissatisfied. Too often, they seek help from those who are qualified to deal with the physical problem involved but have not had the training or experience necessary to recognize that the patient's personality, rather than his physical condition, is the primary consideration.

Consequently, efforts to alter the physical state, regardless of the technical skill employed and the excellence of the results obtained, are unappreciated since the patient's hopeful expectations exceed the possibilities of his physical realities. This is particularly true in the fields of dentistry and plastic surgery where sometimes the most skillful work fails to meet the emotional demands of the patient.

To illustrate this type of psychosomatic problem in the field of dentistry, two case histories are presented. In each instance, the patient seized upon a dental anomaly as the explanation of a definite personality maladjustment. For each, the problem of therapy was not a correction of the dental problem but a recognition of emotional needs.

PATIENT A

A HIGH SCHOOL GIRL sought psychiatric help because she was failing her second-year work and because she had barely succeeded in meeting the first year's requirements. Her reason for coming to the writer was that she knew he was a hypnotist and because she had been much impressed by an extracurricular lecture he had given at her high school. As she entered the office, she remarked that she would probably be hypnotized by a single glance from the writer and that she most likely would not even know she was in a trance. No effort was made to disillusion her.

She had come without her parent's knowledge because she felt that they would not understand her problem. Nor could she go to anybody else she knew because they would minimize her problem and reassure her "falsely."

Her chief complaint was that she was an "absolute freak" in appearance because she had only one double-sized upper incisor tooth. This had not troubled her until the development of physical maturity and a concurrent change in residence which necessitated admission to a high school where she did not know anyone.

Her reaction to this situation had been one of withdrawal, seclusiveness and the development of much wishful thinking in which her teeth were "normal." She found herself extremely self-conscious, was unwilling to eat in the school cafeteria, avoided smiling or laughing at any cost, and her enunciation of words was faulty because of voluntary rigidity of her upper lip. However, her attitude in the office was one of ease, which she explained was because she was probably hypnotized.

During the interview, it was noted that she relied almost exclusively on slang

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and "jive talk." Even when making serious remarks, she couched them in extravagances of slang. In the next two interviews, she was encouraged to display her extensive knowledge of, and fluency in, past and current slang. She was delighted to display her ability. She was an excellent mimic and had a remarkable command of accents which she was most ready to display. Accordingly, she was asked to demonstrate at length the "chopped" speech of the British and the "bitten off" enunciation of the Scotch. She also had an extensive knowledge of popular songs, past and present, comic strips, nursery tales, and light literature of all sorts.

The succeeding interview was devoted to an extensive discussion of the pictur-esque ness of slang. This conversation unnoticeably and deviously led into a discussion of such expressions as L'il Abner's "chompin' gum," "what big teeth you have, Grandmother," "OL' Dan Tucker, who died with a toothache in his heel," "putting the bite on Daddy for more pocket money," "sinking a fang in a banana split," and various other expressions containing references to teeth or dental activity.

She was interested and pleased, but amused by the writer's effort to talk in "hep" style. She contributed gladly and readily to the discussion by calling upon her extensive knowledge of references to teeth in popular songs, nursery tales, comics and slang, without seeming to note the personal implications involved. For the next interview, she promised to "rattle the ivory" with every reference she could dig up from "China Choppers to the Elks' Club."

The following session was fascinating. In response to a request, alternating from British to Scotch pattern of speech and utilizing slang to do so, she proceeded in rapidfire fashion to give from songs, stories, ditties, doggerel, comics, fables, slang old and new, innumerable references to teeth.

When she finally began to slow down, the remark was made, "When you put the bite on a job, you really sink your fang into it; but then you've got the really hep accessory for that. Use your choppers now to chop off a bit more of the British and your fang to bite off a bit more of the Scotch."

She paused abruptly, apparently realizing suddenly the personal implications and the fact that teeth could be an interesting, amusing, and fascinating subject.

Since she also liked puns immensely, she was immediately reminded of the comic "*That's my Pop*" and told to go home, look into the mirror, smile broadly, and then say, "That's my maw." If she did not understand, she was to consult a dictionary.

At the next interview, she was full of smiles and laughter, greeting the writer with a wide grin and saying, "Yes sir, that's my maw." Asked what she had been doing since the last interview, she replied that she had been having a good time "chewing international fat" (i.e., talking with various accents), thereby bewildering her teachers and entertaining her schoolmates. Asked if she felt she were a freak, she stated she did not, but that her instructors surely did when she "chewed the frog, the sauerkraut, or the corn pone" (French, German and South African accents).

Subsequently, one of her high school teachers, while discussing pedagogical problems, commented on a remarkable transformation in one of his students. He had first noted her as a shy, withdrawn, and inept girl whose speech was faulty and whose recitations were unsatisfactory. Then one day, she had given a faultless recitation with a strong British accent, repeating the performance on another day with a Scotch accent. Later, he had heard her chattering to a group in the corridor with a Norwegian accent. He now regarded her as a decidedly brilliant student, though rather inexplicable in her adolescent behavior.

Still later another instructor, in discussing his Ph.D. thesis on aspects of high school behavior, cited the instance of this same girl's remarkable transformation and her amazing linguistic abilities which had rendered her a popular, well-adjusted and competent student.

PATIENT B

A 21 YEAR OLD GIRL employed as a secretary for a construction firm sought therapy because "I'm too inferior to live, I think. I've got no friends, I stay by myself and I'm too homely to get married. I want a husband, a home and children, but I haven't a chance. There's nothing for me but work and being an old maid; but I thought I'd see a psychiatrist before I committed suicide. I'm going to try you for three months' time and then, if things aren't straightened out, that's the end."

She was utterly final in this attitude and consented to only two therapeutic hours a week for three months. She paid in advance and stipulated that she be discharged at the close of the 13th interview. (She had checked the calendar and counted the possible interviews).

She was not communicative about her past history. Her parents, neither of whom had wanted her, had been unhappy as long as she could remember. They were killed in an automobile accident shortly after her graduation from high school. Since then, she had lived in rooming houses and had worked at various stenographic and secretarial jobs. She changed jobs frequently because of dissatisfaction. When questioned concerning herself and her feelings of inferiority, she listed them bitterly as follows:

1. There is an unsightly wide space between my two upper front teeth. It's horrible and I don't dare to smile. (With difficulty she was persuaded to show this: The space was about one eighth of an inch).
2. I can't talk plain (From holding her upper lip stiffly).
3. My hair is black, coarse, straight and too long.
4. My breasts are too small and so are my hips small.
5. My ankles are too thick.
6. My nose is hooked (Actually very slightly).
7. I'm Jewish.
8. I'm an unwanted child, always have been and always will be.

In explaining this list of defects, all emphasis was placed upon the spacing of her upper incisors. To her this was the cause of all her difficulties. She felt that she could adjust to the "other things" but this "horrible spacing" rendered any hope of adjustment impossible. After this unhappy description of herself, she sobbed and endeavored to leave, declaring, "Keep the money, I won't need it where I'm going." However, she was persuaded to adhere to her original plan of three months' therapy.

Contrary to her description, she was definitely a pretty girl, well-proportioned and decidedly attractive. She was graceful in her movements and had good posture, except for her downcast head. Her general appearance was most unattractive. Her hair was straggly, snarled and uneven in length (she cut it herself), and the parting was crooked and careless. Her blouse lacked a button, there was a small rip in the skirt, the color combination of the blouse and the skirt was wrong, her slip showed on one side, her shoes were scuffed and her shoestrings were tied in

unsightly knots. She wore no makeup and while her fingernails were well-shaped, remains of fingernail polish were only on one hand. (She had started to apply fingernail polish a few days previously, but was too discouraged to complete the task or to remove the evidence of her attempt).

During the next four sessions, she was sullen and uncooperative, insisting that the writer earn his fee by doing all the talking. However, it was learned that she was intensely attracted to a young man two years older than she who also worked at her place of employment. She usually arranged to observe him when he went to the drinking fountain down the corridor, but ignored him and never spoke to him, although he had made overtures. Inquiry disclosed that the fountain trips were rather numerous. She made it a point to go whenever he did and apparently he behaved similarly; this had been taking place for the last two months. She proved to be a rather poor hypnotic subject and only a light trance could be induced. These and subsequent interviews were conducted in the light trance.

The next four sessions were primarily devoted to building up the general idea that by a certain date she was to acquire a completely new, quiet and modest outfit of clothes and have her hair dressed at the beauty shop. Then at a date set by the writer, she was to go to work in her new clothes. (During this period of time she continues to wear the same clothes she had worn at the first interview). The rationalization was offered her that since she was not optimistic about the future, she might as well have "one last fling."

The ensuing two sessions were spent on the subject of her "parted teeth." She was given the assignment of filling her mouth with water and squirting it out between her teeth until she acquired a practiced aim and distance. She regarded this assignment as silly and ridiculous but conscientiously practiced each evening "because it doesn't really matter what I do."

The two following sessions were devoted, first indirectly and then more and more directly, to the idea that she would make use of her newly acquired skill of squirting water as a practical joke at the expense of the desirable young man. At first she rejected the idea. Then she accepted it as a somewhat amusing but crude fantasy and finally as a possibility to be definitely executed. The final plan evolved was that on the next Monday, dressed in her new outfit (her nails having been polished and her hair dressed the previous Saturday at the beauty shop), she would await a favorable opportunity to precede the young man to the drinking fountain. There she would wait for his approach, fill her mouth full of water and spray him. Then she was to giggle, start to run toward him, turn suddenly and "run like hell down the corridor."

As was learned later, she carried out the suggestions fully. Late in the afternoon she had seized an opportunity to execute the plan. His look of consternation and his startled exclamation, "You damn little bitch," evoked her laughter at him. When she ran, he pursued her and caught her at the end of the corridor. Upon seizing her he declared, "For that kind of trick you're going to get a good kissing," and suited his actions to his words.

The next day, rather timid and embarrassed, she warily went to the fountain for a drink. As she bent over the fountain, she found herself being sprayed with a water pistol by the young man concealed behind a telephone booth. She immediately filled her mouth with water and charged him, only to turn and run wildly as he met her charge head on; again she was caught and kissed.

The patient failed to keep her next two appointments. She then came in at the next regular time, thoroughly well-groomed in appearance. She gave the foregoing account and stated that the second episode had resulted in a dinner invitation which had been repeated two days later. Now she was considering accepting another invitation for dinner and the theater. She further explained that this outcome of the silly prank suggested by the writer had caused her to spend many thoughtful hours "taking inventory of myself." As a result she had one request to make of him: would he coldly, judiciously and honestly appraise her in detail. When this was done, she would terminate therapy. The smile with which she made this statement was most reassuring. Her request was met by discussing:

1. Her original woebegone, desperate emotional attitude.
2. Her unkempt, frumpish appearance.
3. Her unwarranted derogation of her physical self.
4. Her misconception of a dental asset as a liability.
5. Her sincerity and cooperation in therapy, however bizarre had seemed the ideas presented.
6. The readiness with which she had assumed self-responsibility in reacting to pleasurable life situations.
7. The obvious fact that she now recognized her own personal values.
8. Her need to review her objectives in life as stated in the original interview.
9. Her personal attractiveness, not only as seen by herself, but as appreciated from the masculine point of view.

She listened attentively; at the close of the interview she thanked the writer graciously and took her departure.

Several months later, a marked copy of the local newspaper containing an announcement of her engagement was received in the mail and this was followed six months later by announcement of her marriage to the young man. Fifteen months later, a letter arrived containing a snapshot of her home, the announcement of her son's birth and a newspaper clipping telling of her husband's promotion to junior member of the construction firm. No further direct word has been received, but she has referred several patients to the writer who speak glowingly of her.

Therapy for both of these patients was predicated upon the assumption that there is a strong normal tendency for the personality to adjust if given an opportunity. The simple fact that both patients had centralized their complaints upon one single item of a psychosomatic character, which was alterable if necessary, suggested that prolonged extensive probing into the experiential life of the patients and elaborate reeducation were not necessarily indicated.

The therapeutic results obtained indicate that an uncomplicated psychotherapeutic approach may be most effective in a circumscribed psychosomatic reaction. Had this method failed with these two patients, there would still have remained the possibility of a more elaborate psychotherapeutic procedure.

Pediatric Hypnotherapy*

IN INTRODUCTION to pediatric hypnotherapy, the question may well be asked, What is the difference between hypnotherapy on the small-sized child, the medium-sized child, the large-sized child, and on that older, taller child we encounter so frequently in our offices? Therapy of any kind properly parallels the physical examination in adaptation to the patient as a person possessed of needs requiring recognition and definition. Any therapy should always be in accordance with the needs of the patient, whatever they may be, and not based in any way upon arbitrary classifications.

Psychologically oriented forms of treatment properly employed must be related to the patient's capacity to receive and to understand. Pediatric hypnotherapy is no more than hypnotherapy directed to the child with full cognizance of the fact that the child is a small and a young person. As such, he views the world and its events in a different way than does the adult, and his experiential understandings are limited and quite different from those of the adult. Therefore, not the therapy but only the manner of administering it differs.

Of the utmost importance in the use of hypnosis is the fact that there governs the child, as a growing, developing organism, an ever-present motivation to seek for more and better understandings of all that is about him. This is one of the things that adults so often lose, and which facilitates so greatly the use of hypnosis with all patients. Children have a driving need to learn and to discover. Every stimulus constitutes for them a possible opportunity to respond in some new way. Since the hypnotic trance may be defined, for purposes of conceptualization, as a state of increased awareness and responsiveness to ideas, hypnosis offers to the child a new and ready area of exploration. The limited experiential background of the child, the hunger for new experiences and the openness to new learnings render the child a good hypnotic subject. He is willing to receive ideas, he enjoys responding to them, and there is only the need of presenting those ideas in a manner comprehensible to him. This, as in all other forms of psychotherapy for all types of patients, is a crucial consideration.

Such presentation of ideas should be in accord with the dignity of the patient's experiential background and life experience—there should be no talking down to or over the head of the patient. There needs to be the simple presentation of an earnest, sincere idea by one person to another for the purpose of achieving a common understanding and a common goal and purpose. The mother croons a lullaby to her nursing infant, not to give it an understanding of the words, but to convey a pleasing sense of sound and rhythm in association with pleasing physical sensations for both of them and for the achievement of a common goal. The child that is cuddled properly, handled in an adequate way, placed at the breast in the right way with the proper "hypnotic touch" is not so likely to develop colic. By "hypnotic touch" is meant that type of touch that serves to stimulate in the child an expectation of something pleasurable, and that is continuously stimulating in a pleasing way.

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It is the continuity of the experience that is of importance—it is not just a single touch or pat or caress, but a continuity of stimulation that allows the child, however short its span of attention, to give a continued response to the stimulus. So it is in hypnosis, whether with adults or children. There is a need for a continuum of response eliciting stimuli directed toward a common purpose.

The child at the breast needs the lullaby continued and the nipple between its lips, even after it has satisfied its hunger and is falling asleep. It needs those continuing stimuli until the physiological processes of sleep and digestion serve to replace them. Similarly, in child hypnosis there is a need for a continuity of stimulation, either from without or from within, or a combination of both. Hypnosis, whether for adults or children, should derive from a willing utilization of the simple, good, and pleasing stimuli that serve in everyday life to elicit normal behavior pleasing to all concerned.

Another consideration in using hypnosis therapeutically with children is the general character of the approach to the child. No matter what the age of the child may be, there should never be any threat to the child as a functioning unit of society. Adult physical strength, intellectual strength, force of authority, and weight of prestige are all so immeasurably greater to the child than his own attributes that any undue use constitutes a threat to his adequacy as an individual. Since hypnosis is dependent upon a cooperation in a common purpose, a feeling of goodness and adequacy is desirable for both participants. That sense of goodness and adequacy is not to be based upon a sense of superiority of one's own attributes, but upon a respect for the self as an individual dealing rightfully with another individual; with each contributing his full share to a joint activity of significance to both. There is a need, because of the child's lack of experiential background and understanding, to work primarily *with* and not *on* the child. The adult can better comprehend passive participation.

Nor can there be a linguistic condescension to the child. Comprehension of language always precedes verbal facility. There should not be a talking down to the child, but rather a utilization of language, concepts, ideas and word pictures meaningful to the child in terms of his own learnings. To speak in "baby talk" is usually an insult and a mockery, since any intelligent child knows that the adult possesses vocal facility. One does not imitate the accent of an adult, but one can use a word or phrase respectfully abstracted from the speech of the other. Thus one can speak of "Dem Bums," but cannot rightfully say "Toity-Foist Street." So it is with infantile and childish vocalizations.

Similarly, respect must be given to the child's ideational comprehension with no effort to derogate or minimize the child's capacity to understand. It is better to expect too great a comprehension than to offend by implying a deficiency. For example, the surgeon who told four-year-old Kristi, "Now that didn't hurt at all, did it?" was told with bitter, scornful contempt, "You're poopid! It did, too, hurt, but I didn't mind it." She wanted understanding and recognition; not a falsification, however well-intended, of a reality comprehensible to her. For one to tell a child, "Now this won't hurt one bit" is courting disaster. The child has his own ideas and needs to have them respected; but the child is readily open to any modification of his ideas intelligently presented to him. Thus, to tell the child, "Now this *could* hurt a lot, but I think that maybe you can stop a lot of the hurt, or maybe all of it," constitutes an intelligent appraisal of reality for the child and offers an accep-

table idea of a reasonable and possible responsive participation of an inviting character.

The child must be respected as a thinking, feeling creature, possessed of a capacity to formulate ideas and understandings and able to integrate them into his own total of experiential comprehension; but he must do this in accord with the actual functioning processes he himself possesses. No adult can do this for him, and any approach to the child must be made with awareness of this fact.

To illustrate how one approaches a child and utilizes hypnotic techniques, the following personal example may be cited:

Three-year-old Robert fell down the back stairs, split his lip and knocked an upper tooth back into the maxilla. He was bleeding profusely and screaming loudly with pain and fright. His mother and I went to his aid. A single glance at him lying on the ground, screaming, his mouth bleeding profusely and blood spattered on the pavement confirmed the existence of an emergency requiring prompt and adequate measures.

No effort was made to pick him up. Instead, as he paused for breath for fresh screaming, he was told quickly, simply, sympathetically and emphatically, "That hurts awful, Robert. That hurts terrible."

Right then, without any doubt, my son knew that I knew what I was talking about. He could agree with me and he knew that I was agreeing completely with him. Therefore he could listen respectfully to me, because I had demonstrated that I understood the situation fully. In pediatric hypnotherapy, there is no more important problem than so speaking to the patient that he can agree with you and respect your intelligent grasp of the situation as judged by him in terms of his own understandings.

Then I told Robert, "And it will keep right on hurting."

In this simple statement, I named his own fear, confirmed his own judgment of the situation, demonstrated my good intelligent grasp of the entire matter and my entire agreement with him, since right then, he could foresee only a lifetime of anguish and pain for himself.

The next step for him and for me was to declare, as he took another breath, "And you really wish it would stop hurting." Again, we were in full agreement and he was ratified and even encouraged in this wish. And it was *his* wish, deriving entirely from within him and constituting his own urgent need.

With the situation so defined, I could then offer a suggestion with some certainty of its acceptance. This suggestion was, "Maybe it will stop hurting in a little while, in just a minute or two."

This was a suggestion in full accord with his own needs and wishes and, because it was qualified by a "maybe it will," it was not in contradiction to his own understandings of the situation. Thus he could accept the idea and initiate his responses to it.

As he did this, a shift was made to another important matter, important to him as a suffering person, and important in the total psychological significance of the entire occurrence—a shift that in itself was important as a primary measure in changing and altering the situation.

Too often, in hypnotherapy, or any utilization of hypnosis, there is a tendency to overemphasize the obvious and to reaffirm unnecessarily already accepted suggestions, instead of creating an expectancy situation permitting the development

of desired responses. Every pugilist knows the disadvantage of overtraining; every salesman knows the folly of over-selling. The same human hazards exist in the application of hypnotic techniques.

The next procedure with Robert was a recognition of the meaning of the injury to Robert himself—pain, loss of blood, body damage, a loss of the wholeness of his normal narcissistic self-esteem, of his sense of physical goodness so vital in human living.

Robert knew that he hurt, that he was a damaged person; he could see his blood upon the pavement, taste it in his mouth and see it on his hands. And yet, like all other human beings, he too could desire narcissistic distinction in his misfortune, along with the desire even more for narcissistic comfort. Nobody wants a picayune headache, but since a headache must be endured, let it be so colossal that only the sufferer could endure it. Human pride is so curiously good and comforting! Therefore, Robert's attention was doubly directed to two vital issues of comprehensible importance to him by the simple statements, "That's an awful lot of blood on the pavement. Is it good, red, strong blood? Look carefully, Mother, and see. I think it is, but I want you to be sure."

Thus, there was an open and unafraid recognition in another way of values important to Robert. He needed to know that his misfortune was catastrophic in the eyes of others as well as his own, and he needed tangible proof thereof that he himself could appreciate. Therefore, by declaring it to be "an awful lot of blood," Robert could again recognize the intelligent and competent appraisal of this situation in accord with his own actually unformulated, but nevertheless real, needs.

Then the question about the goodness, redness and strongness of the blood came into play psychologically in meeting the personal meaningfulness of the accident to Robert. In a situation where one feels seriously damaged there is an overwhelming need for a compensatory feeling of satisfying goodness. Accordingly, his mother and I examined the blood on the pavement and we both expressed the opinion that it was good, red, strong blood; thereby reassuring him not on an emotionally comforting basis only, but upon the basis of an instructional, to him, examination of reality.

However, we qualified that favorable opinion by stating that it would be better if we were to examine the blood by looking at it against the white background of the bathroom sink. By this time Robert had ceased crying and his pain and fright were no longer dominant factors. Instead, he was interested and absorbed in the important problem of the quality of his blood.

His mother picked him up and carried him to the bathroom, where water was poured over his face to see if the blood "mixed properly with water" and gave it a "proper pink color." Then the redness was carefully checked and reconfirmed, following which the "pinkness" was reconfirmed by washing him adequately, to Robert's intense satisfaction, since his blood was good, red and strong and made water rightly pink.

Then came the question of whether or not his mouth was "bleeding right" and "swelling right." Close inspection, to Robert's complete satisfaction and relief, again disclosed that all developments were good and right and indicative of his essential and pleasing soundness in every way.

Next came the question of suturing his lip. Since this could easily evoke a negative response, it was broached in a negative fashion to him, thereby pre-

cluding an initial negation by him, and at the same time raising a new and important issue. This was done by stating regretfully that, while he would have to have stitches taken in his lip, it was most doubtful if he could have as many stitches as he could count. In fact, it looked as if he could not even have ten stitches and he could count to twenty. Regret was expressed that he could not have seventeen stitches, like Betty Alice, or twelve, like Allan; but comfort was offered in the statement that he would have more stitches than his siblings, Bert, Lance, or Carol. Thus the entire situation became transformed into one in which he could share with his older siblings a common experience with a comforting sense of equality and even superiority.

In this way, he was enabled to face the question of surgery without fear or anxiety, but with hope of high accomplishment in cooperation with the surgeon and imbued with the desire to do well the task assigned him, namely, to "be sure to count the stitches." In this manner, no reassurances were needed, nor was there any need to offer further suggestions regarding freedom from pain.

Only seven stitches were required, to Robert's disappointment, but the surgeon pointed out that the suture material was of a newer and better kind than any that his siblings had ever had, and that the scar would be an unusual "W" shape, like the letter of his Daddy's college. Thus the fewness of the stitches was well compensated.

The question may well be asked at what point hypnosis was employed. Actually, hypnosis began with the first statement to him and became apparent when he gave his full and undivided interested and pleased attention to each of the succeeding events that constituted the medical handling of his problem.

At no time was he given a false statement, nor was he forcibly reassured in a manner contradictory to his understandings. A community of understandings was first established with him and then, one by one, items of vital interest to him in his situation were thoughtfully considered and decided, either to his satisfaction or sufficiently agreeably to merit his acceptance. His role in the entire situation was that of an interested participant, and adequate response was made to each idea suggested.

Another example that may be briefly cited is that of the belligerent two-year-old in her crib, who wished no dealings with anybody and was prepared to fight it out on that line for the rest of her life. She had a favorite toy, a rabbit. As she was approached and her jutting jaw and aggressive manner were noted, the challenge was offered, "I don't think your rabbit knows how to sleep."

"Wabbit tan too," and the battle was on.

"I don't think your rabbit can lie down with its head on the pillow, if you show it how."

"Wabbit tan too! See!"

"And put its legs and arms down nice and straight like yours?"

"Tan too! See!"

"And close its eyes and take a deep breath and go to sleep and stay asleep?"

"Wabbit sweep!", a declaration made with pleased finality, and Kristi and her rabbit continued to sleep in a satisfactory trance state.

The entire technique, in this instance, was nothing more than that of meeting the child at her own level and as an individual, and presenting ideas to which she could actively respond and thus participate in achieving a common goal acceptable to her and to her adult collaborator.

This type of technique has been employed many times, for the single reason that the primary task in pediatric hypnosis is the meeting of the child's needs of the moment. Those are what the child can comprehend and once that need has been satisfied, there is the opportunity for the therapist to discharge in turn his own obligations.

These two case reports have been presented in considerable detail to illustrate the naturalistic hypnotic approach to children. There is seldom, if ever, a need for a formalized or ritualistic technique. The eidetic imagery of child, his readiness, eagerness and actual need for new learnings, his desire to understand and to share in the activities of the world about him, and the opportunities offered by "pretend" and imitation games all serve to enable him to respond competently and well to hypnotic suggestions.

A good hypnotic technique is one that offers to the patient, whether child or adult, the opportunity to have his needs of the moment met adequately, the opportunity to respond to stimuli and to ideas, and also the opportunity to experience the satisfactions of new learnings and achievements.

Naturalistic Techniques of Hypnosis*

THE NATURALISTIC APPROACH to the problem of the induction of hypnotic trances, as opposed to formalized ritualistic procedures of trance induction, merits much more investigation, experimentation and study than have been accorded it to date.

By naturalistic approach is meant the acceptance of the situation encountered and the utilization of it, without endeavoring to restructure it psychologically. In so doing, the presenting behavior of the patient becomes a definite aid and an actual part in inducing a trance, rather than a possible hindrance. For lack of a more definite terminology, the method may be termed a *naturalistic approach*, in which an aspect of the principle of synergism is utilized.

Basic to this naturalistic approach are the interrelationships and the interdependencies reported by this writer in 1943 and repeatedly confirmed in experience since then. In these studies, emphasis was placed upon the desirability of utilizing one modality of response as an integral part in the eliciting of responses in another modality and upon the dependency upon each other of differing modalities of behavior, somewhat analogous to the increasing of the knee jerk by a tensing of the arm muscles.

To illustrate and clarify these points, a number of reports will be cited.

CASE REPORT NO. 1

A MAN in his 30's became interested in hypnosis and volunteered to act as a subject for some experimental studies at a university. In the first hypnotic session, he discovered that he was an excellent hypnotic subject, but lost his interest in any further experimental studies.

Several years later, he decided to have hypnosis employed by his dentist, since he needed extensive dental work and feared greatly the possibility of pain.

He entered a trance state for his dentist readily, developed an excellent anesthesia of the hand upon suggestion, but failed to be able to transfer this anesthesia or even an analgesia to his mouth in any degree. Instead, he seemed to become even more sensitive orally. Efforts to develop oral anesthesia or analgesia directly also failed.

Further but unsuccessful efforts were painstakingly made by the dentist and a colleague to teach this patient by various techniques anesthesia or analgesia. He could respond in this way only in parts of the body other than the mouth. He was then brought to this writer as a special problem.

A trance state was induced readily and the patient was casually reminded of his wish for comfort in the dental chair. Thereupon, he was instructed to be attentive to the instructions given him and to execute them fully.

Suggestions were then given him that his left hand would become exceedingly sensitive to all stimuli, in fact painfully so. This hyperesthetic state would continue until he received instructions to the contrary. Throughout its duration, however, adequate care would be exercised to protect his hand from painful contacts.

*Amer. J. Clin. Hyp. 1, 1958, 3-8.

The patient made a full and adequate response to these suggestions. In addition to the hyperesthesia of the hand, and *entirely without any suggestion to that effect*, he spontaneously developed an anesthesia of his mouth, permitting full dental work with no other anesthetic agent.

Even in subsequent efforts, anesthesia or analgesia could not be induced directly or purposely except as a part of the hyperesthesia-anesthesia pattern peculiar to that patient. However, this is not a single instance of this type of behavior. Other comparable cases have been encountered from time to time.

Apparently, psychologically, the patient's fixed understanding was that dental work must absolutely be associated with hypersensitivity. When this rigid understanding was met, dental anesthesia could be achieved, in a fashion analogous to the relaxation of one muscle permitting the contraction of another.

CASE REPORT NO. 2

HYPNOSIS had been attempted repeatedly and unsuccessfully on a dentist's wife by her husband and several of his colleagues. Each time, she stated, she became "absolutely scared stiff, so I just couldn't move and then I'd start crying. I just couldn't do anything they asked. I couldn't relax, I couldn't do hand levitation, I couldn't shut my eyes; all I could do was be scared silly and cry."

A naturalistic approach, employing "synergism" was utilized. A general summary of her situation was offered to her in the following words:

"You wish to have hypnosis utilized in connection with your dental work. Your husband and his colleagues wish the same, but each time hypnosis was attempted, you have failed to go into a trance. You got scared stiff and you cried. It would really be enough just to get stiff without crying. Now you want me to treat you psychiatrically, if necessary, but I don't believe it is. Instead, I will just put you in a trance so that you can have hypnosis for your dentistry."

She replied, "But I'll just get scared stiff and cry."

She was answered with, "No, you will first get stiff. That is the first thing to do and do it now. Just get more and more stiff, your arms, your legs, your body, your neck—completely stiff—even stiffer than you were with your husband."

"Now close your eyes and let the lids get stiff, so stiff that you can't open them."

Her responses were most adequate.

"Now the next thing you have to do is to get scared silly and then to cry. Of course, you don't want to do this, but you have to because you learned to, but don't do it just yet."

"It would be so much easier to take a deep breath and relax all over and to sleep deeply."

"Why don't you try this, instead of going on to getting scared silly and crying?"

Her response to this alternative suggestion was immediate and remarkably good.

The next suggestion was, "Of course you can continue to sleep deeper and deeper in the trance state and be relaxed and comfortable. But any time you wish, you can start to get scared stiff and silly and to cry. But maybe now that you know how to do so, you will just keep on being comfortable in the trance so that any dental or medical work you need can be done comfortably for you."

A simple post-hypnotic suggestion to enable the induction of future trances was then given.

Following this, she was asked if she was interested in discovering that she was

a competent subject. Upon her assent, various phenomena of the deep somnambulistic trance were elicited to her pleasure and satisfaction.

Since then, for a period of nearly a year, she has been an excellent hypnotic subject.

CASE REPORT NO. 3

ANOTHER TYPE of case in which this same general approach was utilized concerns a bride of a week, who desired a consummation of her marriage but developed a state of extreme panic with her legs in the scissors position at every attempt or offer of an attempt.

She entered the office with her husband, haltingly gave her story, and explained that something had to be done, since she was being threatened with an annulment. Her husband confirmed her story and added other descriptive details.

The technique used was essentially the same as that utilized in a half dozen similar instances.

She was asked if she were willing to have any reasonable procedure employed to correct her problem. Her answer was, "Yes, anything except that I mustn't be touched, because I just go crazy if I'm touched." This statement her husband corroborated.

She was instructed that hypnosis would be employed. She consented hesitantly, but again demanded that no effort be made to touch her.

She was told that her husband would sit continuously in the chair on the other side of the office and that the writer would also sit beside her husband. She, however, was personally to move her chair to the far side of the room, there to sit down and watch her husband continuously. Should either he or the writer at any time leave their chairs, she was to leave the room immediately, since she was sitting next to the office door.

Then she was to sprawl out in her chair, leaning far back with her legs extended, her feet crossed, and all the muscles fully tensed. She was to look at her husband fixedly until all she could see would be him, with just a view of the writer out of the corner of her eye. Her arms were to be crossed in front of her and her fists were to be tightly clenched.

Obediently she began this task. As she did so, she was told to sleep deeper and deeper, seeing nothing but her husband and the writer. As she slept more and more deeply, she would become scared and panicky, unable to move or to do anything except to watch us both and to sleep more and more deeply in the trance, in direct proportion to her panic state.

This panic state, she was instructed, would deepen her trance, and at the same time hold her rigidly immobile in the chair.

Then gradually, she was told, she would begin to feel her husband touching her intimately, caressingly, even though she would continue to see him still on the other side of the room. She was asked if she were willing to experience such sensations and she was informed that her existing body rigidity would relax just sufficiently to permit her to nod or to shake her head in reply, and that an honest answer was to be given slowly and thoughtfully.

Slowly she nodded her head affirmatively.

She was asked to note that both her husband and the writer were turning their

heads away from her, because she would now begin to feel a progressively more intimate caressing of her body by her husband, until finally she felt entirely pleased, happy and relaxed.

Approximately five minutes later, she addressed the writer, "Please don't look around. I'm so embarrassed. May we go home now, because I'm all right?"

She was dismissed from the office and her husband was instructed to take her home and passively await developments.

Two hours later, a joint telephone call was received explaining simply, "Everything is all right."

A check-up telephone call a week later disclosed all to be well. Approximately 15 months later, they brought their first-born in with greatest of pride.

Similar techniques have been employed in instances of nuptial impotence. The cases in which this general approach has been employed are eight in number; only one illustrative example will be cited.

CASE REPORT NO. 4

THIS 24 YEAR OLD college-bred bridegroom returned from his honeymoon of two weeks most despondent in mood. His bride went immediately to a lawyer's office to seek an annulment, while he sought psychiatric aid.

He was persuaded to bring his wife to the office and, without difficulty, she was persuaded to cooperate in the hypnotherapy of her husband.

This proceeded in the following fashion.

He was told to look at his wife and to experience anew and completely his sense of absolute shame, humiliation and hopeless helplessness.

As he did this, he would feel like doing anything, *just anything*, to escape from that completely wretched feeling. As this continued, he would feel himself becoming unable to see anything except his wife, even unable to see the writer, though able to hear his voice. As this happened, he would realize that he was entering a deep hypnotic trance *in which he would have no control over his entire body*. Then he would begin to hallucinate his bride in the nude, and then himself in the nude. This would lead to a discovery that he could not move his body and that he had no control over it. In turn, this would then lead to the surprising discovery for him that he was sensing physical contact with his bride that would become more and more intimate and exciting, and that there would be nothing he could do to control his physical responses. However, there could be no completion of his uncontrolled responses until his bride so requested.

The trance state developed readily and in full accord with the instructions given above.

At the conclusion of the trance state, he was instructed; "You now know that you can, you are confident. In fact, you have succeeded and there is nothing that you can do to keep from succeeding again and again."

Consummation was readily effected that evening. They were seen thereafter occasionally in the role of a family advisor and their marriage has been happy for more than ten years.

Another type of case concerns the small child who has been brought unwillingly to the office, and whose parents have both threatened and bribed him in relation to the office call.

CASE REPORT NO. 5

AN EXAMPLE is that of an enuretic eight year old boy, half carried, half dragged into the office by his parents. They had previously solicited the aid of the neighbors on his behalf and he had been prayed for publicly in church. Now he was being brought to a "crazy doctor" as the last resort with a promise of a "hotel dinner," to be provided following the interview.

His resentment and hostility toward all were fully apparent.

The approach was made by declaring, "You're mad and you're going to keep right on being mad, and you think there isn't a thing you can do about it, but there is. You don't like to see a 'crazy doctor,' but you are here and you would like to do something, but you don't know what. Your parents brought you here, made you come. Well, you can make them get out of the office. In fact, we both can—come on, let's tell them to go on out." At this point the parents were unobtrusively given a dismissal signal, to which they readily responded, to the boy's immediate, almost startled, satisfaction.

The writer then continued, "But you're still mad and so am I, because they ordered me to cure your bedwetting. But they can't give me orders like they give you. But before we fix them for that,"—with a slow, elaborate, attention-compelling, pointing gesture—"look at those puppies right there. I like the brown one best, but I suppose you like the black-and-white one, because its front paws are white. If you are very careful, you can pet mine, too. I like puppies, don't you?"

Here the child, taken completely by surprise, readily developed a somnambulistic trance, walked over and went through the motions of petting two puppies, one more than the other. When finally he looked up at the writer, the statement was made to him, "I'm glad you're not mad at me any more and I don't think that you or I have to tell your parents anything. In fact, maybe it would serve them just right for the way they brought you here if you waited until the school year was almost over. But one thing is certain. You can just bet that after you've had a dry bed for a month, they will get you a puppy just about like little Spotty there, even if you never say a word to them about it. They just got to. Now close your eyes, take a deep breath, sleep deeply, and wake up awful hungry."

The child did as instructed and was dismissed in the care of his parents, who had been given instructions privately.

Two weeks later he was used as a demonstration subject for a group of physicians. No therapy was done.

During the last month of the school year, the boy each morning dramatically crossed off the current calendar day.

Toward the last few days of the month he remarked cryptically to his mother, "You better get ready."

On the 31st day, his mother told him there was a surprise for him. His reply was, "It better be black-and-white." At that moment his father came in with a puppy. In the boy's excited pleasure, he forgot to ask questions:

Eighteen months later, the boy's bed was still continuously dry.

CASE REPORT NO. 6

ONE FINAL CASE concerns a 16 year old high school girl, whose thumb-sucking

was the bane of her parents, her teachers, her schoolmates, the school bus driver, in fact, the special abhorrence of everybody who came in contact with her.

After much effort on their part, the soliciting of the aid of the entire neighborhood, the intervention (as in the preceding case) by public prayer in church, the forcing of her to wear a sign declaring her to be a thumb-sucker, it was finally decided in desperation by the parents to consult a psychiatrist as a last and shameful resort.

The parents' first statement to the writer was to express the hope that therapy of their daughter would be based primarily upon religion. As matters progressed, a promise was extracted from them that after the girl became the writer's patient, for a whole month neither parent would interfere with therapy, no matter what happened, nor would a single word or look of admonition be offered.

The girl came unwillingly to the office with her parents. She was nursing her thumb noisily. Her parents were dismissed from the office and the door closed. As the writer turned to face the girl, she removed her thumb sufficiently to declare her dislike of "nut doctors."

She was told in reply, "And I don't like the way your parents ordered me to cure your thumb-sucking. Ordering me, huh! It's your thumb and your mouth and why in hell can't you suck it if you want to? Ordering me to cure you. Huh! The only thing I'm interested in is why, when you want to be aggressive about thumb-sucking, you don't really get aggressive instead of piddling around like a baby that doesn't know how to suck a thumb aggressively."

"What I'd like to do is tell you how to suck your thumb aggressively enough to irk the hell out of your old man and your old lady. If you're interested, I'll tell you—if you aren't, I'll just laugh at you."

The use of the word "hell" arrested her attention completely—she knew that a professional man ought not to use that kind of language to a high school girl who attended church regularly.

Challenging the inadequacy of her aggressiveness, two terms the school psychologist had taught her, commanded her attention still more.

The offer to teach her how to irk her parents, referred to so disrespectfully, elicited even more complete fixation of her attention so that, to all intents and purposes, she was in a hypnotic trance.

Thereupon, in an intent tone of voice, she was told:

"Every night after dinner, just like a clock, your father goes into the living room and reads the newspaper from the front page to the back. Each night when he does that, go in there, sit down beside him, really nurse your thumb good and loud, and irk the hell out of him for the longest 20 minutes he has ever experienced.

"Then go in the sewing room, where your mother sews for one hour every night before she washes dishes. Sit down beside her and nurse your thumb good and loud and irk the hell out of the old lady for the longest 20 minutes she ever knew.

"Do this every night and do it up good. And on the way to school, figure out carefully just which crummy jerk you dislike most and, every time you meet him, pop your thumb in your mouth and watch him turn his head away. And be ready to pop your thumb back if he turns to look again.

"And think over all your teachers and pick out the one you really dislike and

treat that teacher to a thumb pop every time he or she looks at you. I just hope you can be really aggressive."

After some desultory irrelevant remarks, the girl was dismissed and her parents summoned into the office.

They were reminded of the absoluteness of their promise and the declaration was made that if they kept their promises faithfully, the girl's thumb-sucking would cease within a month. Both parents affirmed their wholehearted cooperation.

On the way home, the girl did not suck her thumb and she was silent the entire trip. The parents were so pleased that they telephoned to report their gratification.

That evening, to her parent's horror, the girl obeyed instructions, as they did, all of which they reported unhappily by telephone the next day. They were reminded of their promise and of the writer's statement of the girl's prognosis.

Each night, for the next ten evenings, the girl was faithful in her performance.

Then it began to pall on her. She began to shorten the time, then she began late and quit early, then finally she skipped, and then she forgot!

In less than four weeks, the girl had discontinued her thumb-sucking, both at home and elsewhere. She became increasingly interested in the much more legitimate teenage activities of her own group. Her adjustments improved in all regards.

The girl was seen again in a social setting about a year later. She recognized the writer, viewed him thoughtfully for a few minutes and then remarked, "I don't know whether I like you or not, but I am grateful to you."

One of the most important of all considerations in inducing hypnosis is meeting adequately the patient as a personality and his needs as an individual. Too often, the effort is made to fit the patient to an accepted formal technique of suggestion, rather than adapting the technique to the patient in accord with his actual personality situation. In any such adaptation, there is an imperative need to accept and to utilize those psychological states, understandings and attitudes that the patient brings into the situation. To ignore those factors in favor of some ritual of procedure may and often does delay, impede, limit or even prevent the desired results. The acceptance and utilization of those factors, on the other hand, promotes more rapid trance induction, the development of more profound trance states, the more ready acceptance of therapy and greater ease for the handling of the total therapeutic situation.

Another important consideration is the need to avoid a repetitious belaboring of the obvious. Once the patient and the therapist have a clear understanding of what is to be done, only fatigue is to be expected from further iteration. The acceptance as an absolute finality of the definition of understandings of what the patient wants and needs what is to be done, and then expectantly and confidently awaiting the patient's responses serves more readily to elicit the desired results than repetitious instructions for specific responses. This simplicity of instructions with adequate results is clearly illustrated in the second case report above.

In brief, in each of the above case reports, an effort has been made to illustrate the utilization of patient behavior and patient needs as a naturalistic technique of hypnotic trance induction, and hypnotherapy. An effort has been made to demonstrate that the adaptation of hypnotic techniques to the patient and his needs, rather than vice versa, leads readily and easily to effective therapeutic results.

Hypnosis in Painful Terminal Illness*

THE USE OF PSYCHOLOGICAL MEASURES in the treatment of human illness is as old as human history. The psychological aspect of medicine constitutes the art of medicine and transforms the physician from a skillful mechanic or technician into a needed human source of faith, hope, assistance and, most importantly, of motivation toward physical and mental well-being. Hence, it is not surprising that hypnosis should be considered as a psychological measure in the treatment of painful terminal illness, particularly the last stages of malignant disease.

However, it must be emphasized that hypnosis is not an absolute answer and cannot replace other medical procedures in this situation. Rather it is no more than one of the adjuvants or synergistic measures that can be employed to meet the patient's needs. The question is not one of treating the illness itself, since the patient is dying and suffering painfully. The primary problem is how to treat the patient so that his human needs may be met as much as possible. Thus, it becomes a complex problem of what the physical body requires and what the personality needs. Cultural and individual psychological patterns are of as much and perhaps greater importance than the physiological experience of pain.

In terminal painful disease, sedatives, analgesics and narcotics are employed that may deprive the patient of the privilege of knowing that he is alive and of enjoying what pleasures yet remain; they also deprive his relatives of adequate contacts with him. Hence, medication should be administered only in those quantities that meet the physical requirements without obstructing or defeating those psychological needs vital to the total life situation.

To illustrate this point and to clarify the foregoing discussion, three case reports will be cited:

CASE 1

THE FIRST PATIENT was a 37 year old woman of grade-school education, mother of four children, dying of advanced metastatic carcinomatous disease originating in the uterus. For the three weeks preceding hypnosis, she had been kept in a narcotic semi-stupor, since this was the only way to control her pain so as to allow her to sleep and to eat without extensive nausea and vomiting. The patient understood her condition and resented helplessly her inability to spend the remaining weeks of her life in contact with her family. The family physician finally decided to have hypnosis employed. The situation was explained to the patient and narcotics were omitted on the day she was to be hypnotized so that this could be done without excessive drug interference.

Approximately four continuous hours were spent with this patient systematically teaching her, despite her attacks of pain, how to go into a trance, how to develop a numbness of her body, absorb herself in a state of profound fatigue so that she could have physiological sleep despite pain, and to enjoy her food without gastric distress. No elaborate explanations were necessary since her

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educational limitations and desperate situation motivated a ready acceptance of suggestions without questioning doubts. Additionally, she was trained hypnotically to respond to her husband, her oldest daughter and to her family physician, so that hypnosis could be readily reinforced in the event of any new development. This one time was the only occasion on which the patient was seen by the writer. Her motivation was so great that the single hypnotic training session was sufficient.

The previous medication, it was found, could actually be discontinued except for one heavy hypodermic administration late Thursday evening. This gave her additional relief and allowed her to be in full contact with her family in a rested state on the weekends. She also shared in the family evening activities during the week. Six weeks after her first trance, while laughing and talking to her daughter, she suddenly lapsed into a coma and died two days later without recovering consciousness. Those six weeks had been decidedly happy and pain-free for her.

CASE 2

THIS 35 YEAR OLD WOMAN, the mother of four small children and wife of a professional man, was seen five weeks before her death from lung cancer. For a month before hypnosis, she had been almost continuously in a narcotic stupor since the pain she experienced was unbearable to her. She asked that hypnosis be employed and voluntarily went without medication that entire day in her own self-determined effort to ready herself for hypnosis. She was seen at 6:00 p.m. bathed in perspiration, suffering acutely from constant pain and greatly exhausted. Nevertheless, approximately four hours of continuous effort were required before a light trance could be induced. This light stage of hypnosis was immediately utilized to induce her to permit three things to be accomplished, all of which she had consistently refused to allow in the very intensity of her desire to be hypnotized. The first was the hypodermic administration of one-eighth grain of morphine sulfate, a most inadequate dosage for her physical needs, but one considered adequate for the immediate situation. The second was the serving to her of a pint of rich soup and the third the successful insistence on an hour's restful physiological sleep. By 6 a.m., the patient, who finally proved to be an excellent somnambulistic subject, had been taught successfully everything considered to be essential to meet the needs of her situation.

The first step was to teach her positive and negative hallucinations in the modalities of vision, hearing, taste and smell. Then she was taught positive and negative hallucinations in the areas of touch, deep sensation and kinesthesia, and in relation to this latter type of sensation, she was taught body disorientation and dissociation. When these learnings were sufficiently well acquired, the patient was given suggestions for glove and stocking anesthesias and these were extended over her entire body. Thereupon, it became possible to teach her rapidly combined partial analgesias and anesthesias for superficial and deep sensations for all types. To this was added a combination of body disorientation and body dissociation to supplement the foregoing measures. The patient was not seen again professionally or socially, but her husband telephoned or gave reports in person daily concerning her condition. She died suddenly five weeks later in the midst of a happy social conversation with a neighbor and a relative.

During that five weeks' period, she had been instructed to feel free to accept whatever medication she needed. Now and then she would suffer pain but this was almost always controlled by aspirin. Sometimes a second dose of aspirin with codeine was needed and on half a dozen occasions one-eighth grain of morphine was needed. Otherwise, except for her gradual progressive physical deterioration, the patient continued comfortable and cheerfully adjusted to the end.

CASE 3

THE THIRD PATIENT was a professionally trained man of advanced years who understood fully the nature of his carcinomatous illness. Because of his educational background, it was necessary and advantageous to develop the hypnotic suggestions with care in order to secure both his intellectual and emotional cooperation. While resigned to his fate, he resented greatly the narcotic stupors he developed when given sufficient medication to control his pain. It was his earnest desire to spend his remaining days in the fullest possible contact with his family, but this he found difficult because of the severely agonizing recurrent pains he suffered. He requested hypnosis as a solution and himself discontinued medication for 12 hours in order to avoid a possible narcotic interference with a trance development.

At the first hypnotic session, all suggestions were directed to the induction of a state of profound physical fatigue, overwhelming sleepiness, and a need to enter physiological sleep and rest sufficiently to permit the induction of a hypnotic trance. A light trance was induced which almost immediately lapsed into a physiological sleep of about 30 minutes' duration. He aroused from this definitely rested and most firmly convinced of the efficacy of hypnosis.

A second medium trance was then induced. Systematically a series of suggestions was given in which direct use was made of the patient's actual symptomatology. The rationale for this was to validate the hypnotic suggestions through utilizing the experiential validity of his symptoms. The patient was told that his body would feel tremendously heavy, like a dull, leaden weight; so heavy that it would feel as if sodden with sleep and incapable of sensing anything else except heavy tiredness. These suggestions (repetitiously given in varying phraseology to insure comprehensive acceptance) were intended to utilize the patient's previously unacceptable feeling of distressing weakness and combine it with his complaint of a "constant, heavy, dull, throbbing ache." In addition, suggestions were given that, again and again, as he experienced the "dull heavy tiredness" of his body it would periodically go to sleep, while his mind remained awake. Thus his distressing feeling of weakness and his dull throbbing ache were utilized to secure a redirection and a reorientation of his attentiveness and responsiveness to his somatic sensations and to secure a new and acceptable perception of them. Also, by suggesting a sleeping of the body and wakefulness of the mind, a state of dissociation was induced. The next step was to reorient and redirect his attentiveness and responsiveness to the sharp, brief, constantly recurring, agonizing pains from which he suffered, usually less than ten minutes apart. While actually less than one minute in duration, these pains were experienced by the patient as "endless" and "continuous" in character. The procedure followed included several steps: First he was oriented in relation to subjective time values by asking him, at the expiration of a sharp pain, to fix his

attention rigidly on the movement of the minute hand of a clock and await the next sharp pain. The slightly more than seven minutes of waiting in anticipatory dread seemed hours long to the patient and it was with definite relief from his feeling of wretched expectation that he suffered the next sharp pain. Thus *anticipation* and *pain* were differentiated for him as separate experiences. In this way, he also acquired an understanding of that aspect of time distortion related to the "lengthening" or "expansion" of subjective time experience.

Next, a careful explanation was given to him that freedom from the experience of pain could be accomplished in several ways—by anesthesia and analgesia, both of which he understood; and by amnesia, which he did not understand. The explanation was offered that in amnesia for pain, one could experience pain throughout its duration but would then immediately forget it; thus one would not look back upon the experience with horror and distress nor look forward to another similar pain experience with anticipatory dread and fear. In other words, each recurrent sharp pain could be and would become a totally unexpected and completely transient experience. Because it would be neither anticipated nor remembered, it would seem experientially to have no temporal duration. Hence it would be experienced only as a momentary flash of sensation of such short duration that there would be no opportunity to recognize its character. In this fashion, the patient was taught another aspect of time distortion, namely a "shortening," "contraction," or "condensation" of subjective time. Thus in addition to the possible hypnotic anesthesia, analgesia or amnesia for the pains, there was also the hypnotic reduction of their subjective temporal duration which would in itself serve to diminish greatly the pain experience.

When these matters had been made clear to the patient, he was urged most insistently to employ all of the mechanisms that had been suggested: alteration of body sensations, body disorientation, dissociation, anesthesia, analgesia, amnesia and subjective time condensation. In this way, it was argued, he could quite conceivably free himself from pain more readily than by employing a single psychological process. In addition the suggestion was also offered emphatically that he employ subjective time expansion to lengthen experientially all periods of physical comfort, rest or freedom from pain.

Through this variety of differently directed suggestions given repetitiously and in different phrasings to insure adequate comprehension and acceptability, the patient's sharp recurring pains were abolished in large part insofar as observation of his objective behavior and his own subjective reports were concerned. However, it was noted that, periodically, he would lapse into a brief unresponsive stupor-like state of 10–50 seconds' duration, an item of behavior suggestive of a massive obscuring reaction to pain. It was noted that these were less frequent and shorter in duration than the original sharp pains had been. It was also observed that the patient appeared to have no realization whatsoever of his periodic lapses of awareness.

No systematic inquiry could be conducted into the actual efficacy of the suggestions. The patient simply reported that hypnosis had freed him almost completely of his pains, that he felt heavy, weak and dull physically, and that not over twice a day did any pain "break through." His general behavior with his family and friends validated his report. Some weeks after the institution of hypnotic therapy, the patient lapsed suddenly into coma and died without recovering consciousness.

COMMENT

AN EFFORT has been made to describe the therapeutic methodologies employed. Hypnotherapeutic benefits, especially in such cases as reported here, are markedly contingent upon a varied and repetitious presentation of ideas and understandings to insure an adequate acceptance and responsiveness on the part of the patient. The very nature of the situation precludes a determination of what elements in the therapeutic procedure are effective in the individual case. These three case reports definitely indicate that hypnosis can be of value in treating terminal painful illness. However, hypnosis is not to be regarded as an absolute answer to all the medical problems involved. It is merely one of the possible approaches to the handling of the patient's problems that possesses special and highly significant values at both psychological and physiological levels. While hypnosis can sometimes be used alone as a means of pain control in carcinomatous disease, more often it is properly used as an adjuvant. In that capacity, it can serve to diminish significantly the drug dosage required and effect a much greater mental and physical relief than is obtainable when drugs alone are used. The more comprehensive psychologically the hypnotic approach, the greater is the possibility of therapeutic results.

The Identification of a Secure Reality*

REALITY, SECURITY, and the definition of boundaries and limitations constitute important considerations in the growth of understanding in childhood. To an eight year old child, the question of what constitutes power and strength and reality and security can be a serious matter. When one is small, weak, and intelligent, living in an undefined world of intellectual and emotional fluctuations, one seeks to learn what is really strong, secure, and safe.

A 27 year old mother began to encounter serious difficulty with her eight year old son who was becoming progressively defiant and seemed to find a new way to defy her each day. The mother had divorced her husband two years previously, for adequate reasons recognized by all concerned. In addition to her son she had two daughters aged nine and six. After some months of occasional dating with men in the hope of marriage, she found her son had become rebellious and an unexpected problem. The older daughter had joined him briefly in this rebelliousness. The mother was able to correct the daughter by her customary measures of discipline through anger, shouting, scolding, threatening and then an angry spanking followed by an intelligent, reasonable, objective discussion with the child. This had, in the past, always been effective with the children. However, her son Joe refused to respond to her usual measures even when she added repeated spankings, deprivations, tears, and the enlistment of her family's assistance. Joe merely stated, quite happily and cheerfully, that he planned to do whatever he pleased and nothing, just nothing, could stop him.

The son's misbehavior spread to the school and to the neighborhood and literally nothing was safe from his depredations. School property was destroyed, teachers defied, schoolmates assaulted; neighbors' windows were broken and their flower beds destroyed. The neighbors and teachers, endeavoring to take a hand in the matter, succeeded in intimidating the child but nothing more. Finally the boy began destroying things of value in the home, especially after the mother was asleep at night, and then he would infuriate her by boldly denying guilt the next morning.

This final mischief led the mother to bring the boy in for treatment. As the mother told her story, Joe listened with a broad triumphant smile. When she had finished, he boastfully declared that the author could not do anything to stop him and he was going to go right on doing as he pleased. The author assured him, gravely and earnestly, that it was unnecessary for him to do anything to change the boy's behavior because he was a good big strong boy and very smart and he would have to change his behavior all by himself. The boy was assured that his mother would do just enough to give him a chance to change his behavior "all by himself." Joe received this statement in an incredulous, sneering manner. Then he was sent out of the office with the statement that his mother would be told some simple little things that she could do so that he himself could change his behavior. He was also earnestly challenged in a most kindly fashion to try to figure out what those

**Family Process.*, 1962, 1, 294-303.

simple little things might be. This served to puzzle him into quiet reflective behavior while he awaited his mother.

Alone with the mother, the author discussed a child's demand for a world in which he could be certain that there was someone stronger and more powerful than he. To date, her son had demonstrated with increasing desperation that the world was so insecure that the only strong person in it was himself, a little eight year old boy. Then the mother was given painstakingly clear instructions for her activities for the next two days.

As they left the office, the boy challengingly asked if the author had recommended spankings. He was assured that no measure would be taken except to give him full opportunity to change his own behavior; no one else would change it. This reply perplexed him, and on the way home his mother administered severe corporal punishment to compel him to let her drive the automobile safely. This misconduct had been anticipated; the mother had been advised to deal summarily with it and without argument. The evening was spent in the usual fashion by letting the boy watch television as he wished.

The following morning the grandparents arrived and picked up the two daughters. Joe, who had plans to go swimming, demanded his breakfast. He was most puzzled when he observed his mother carry into the living room some wrapped sandwiches, fruit, a thermos bottle of fruit juice and one of coffee, and some towels. She put all these items securely on a heavy couch with the telephone and some books. Joe demanded that she prepare his breakfast without delay, threatening physical destruction of the first thing he could lay his hands on if she did not hurry. His mother merely smiled at him, seized him, threw him quickly to the floor on his stomach and sat her full weight upon him. When he yelled at her to get off, she replied mildly that she had already eaten breakfast and she had nothing to do except to try to think about ways to change his behavior. However, she pointed out that she was certain she did not know any way, therefore it would all be up to him.

The boy struggled furiously against the odds of his mother's weight, strength, and watchful dexterity. He yelled, screamed, shouted profanity and obscenities, sobbed and finally promised piteously always to be a good boy. His mother answered that the promise did not mean anything because she had not yet figured out how to change his behavior. This evoked another fit of rage from him which finally ceased and was followed by his urgent plea to go to the bathroom. His mother explained gently that she had not finished her thinking; she offered him a towel to mop up so he would not get too wet. This elicited another wild bit of struggling which soon exhausted him. His mother took advantage of the quiet to make a telephone call to her mother. While Joe listened, she explained casually that she had not yet reached any conclusion in her thinking and she really believed that any change in behavior would have to come from Joe. Her son greeted this remark with as loud a scream as he could muster. His mother commented into the telephone that Joe was too busy screaming to think about changing his behavior, and she put the mouthpiece down to Joe's mouth so that he could scream into it.

Joe lapsed into sullen silence, broken by sudden surges of violent effort, screams, demands and sobbing interrupted by piteous pleas. To all of this his mother gave the same mild, pat answers. As time passed, the mother poured herself coffee, fruit juice, ate sandwiches, and read a book. Shortly before noon the boy politely told her he really did need to go to the bathroom. She confessed a

similar need. She explained that it would be possible if he would agree to return, resume his position on the floor, and let her sit down comfortably upon him. After some tears, he consented. He fulfilled his promise, but almost immediately launched into renewed violent activity to dislodge her. Each near success led to further effort which exhausted him still more. While he rested, she ate fruit and drank coffee, made a casual telephone call, and read a book.

After over five hours Joe surrendered by stating simply and abjectly that he would do anything and everything she told him to do. His mother replied just as simply and earnestly that her thinking had been in vain; she just did not know what to tell him to do. He burst into tears at this but shortly, sobbing, he told her he knew what to do. She replied mildly that she was very glad of this but she did not think he had had enough time to think long enough about it. Perhaps another hour or so of thinking might help.

Joe silently awaited the passing of an hour while his mother sat reading quietly. When over an hour had passed, she commented on the time but expressed her wish to finish the chapter. Joe sighed shudderingly and sobbed softly to himself while his mother finished her reading.

With the chapter finally finished, the mother got up and so did Joe. He timidly asked for something to eat. His mother explained in laborious detail that it was too late for lunch, that breakfast was always eaten before lunch, and that it was too late to serve breakfast. She suggested instead that he have a drink of ice water and a comfortable rest in bed for the remainder of the afternoon.

Joe fell asleep quickly but awakened to the odors of well-liked foods. His sisters had returned, and he tried to join them at the table for the evening meal. His mother explained, gravely, simply and in lucid detail that it was customary first to eat breakfast and then lunch and then dinner. Unfortunately, he had missed his breakfast, therefore he had to miss his lunch. Now he would have to miss his dinner, but fortunately he could begin a new day the next morning. Joe returned to his bedroom and cried himself to sleep. The mother slept lightly that night, but Joe did not arise until she was well along with breakfast preparations.

Joe entered the kitchen with his sisters for breakfast and sat down happily while his mother served his sisters with pancakes and sausages. At Joe's place was a large bowl. His mother explained that she had cooked him an extra special breakfast of oatmeal, a food not too well-liked by him. Tears came to his eyes, but he thanked her for the serving as was the family custom, and he ate reluctantly. His mother explained that she had cooked an extra supply so that he could have a second helping. She also cheerfully expressed the hope that enough would be left over to meet his needs for lunch. Joe ate manfully to prevent that possibility; but his mother had cooked a remarkably large supply.

After breakfast, Joe set about cleaning up his room without any instruction. This done, he asked his mother if he could call upon the neighbors; she had no idea what this portended but gave permission. From behind the window curtains she watched him while he went next door and rang the bell. When the door opened, he apparently spoke to the neighbor briefly and then went on up the street. As she later learned, just as systematically as he had terrorized the neighborhood he canvassed it to offer his apologies and to promise that he would come back to make amends as fast as he could. He explained that it would take a considerable period of time for him to undo all the mischief he had done.

Joe returned for lunch, ate buttered cold thick sliced oatmeal, helped voluntarily to dry the dishes, and spent the afternoon and evening with his school books while his sisters watched television. The evening meal was ample but consisted of leftovers, which Joe ate quietly without comment. At bedtime Joe went to bed voluntarily while his sisters awaited their mother's usual insistence.

The next day Joe went to school where he made his apologies and promises. These were accepted warily. That evening he became involved in a typical childish quarrel with his older sister who shrieked for her mother. As the mother entered the room, Joe began to tremble visibly. Both children were told to sit down, and the sister was asked to state her case first. When it became his turn to speak, Joe said he agreed with his sister. His mother then explained to Joe that she expected him to be a normal eight year old boy and to get into ordinary trouble like all regular eight year old boys. Then she pointed out to both of them that their quarrel was lacking in merit and was properly to be abandoned. Both children acquiesced.

GAINING MOTHER'S COOPERATION

THE EDUCATION of Joe's mother to enable her to deal with her son's problem by following out the instructions was a rather difficult task. She was a college graduate, a highly intelligent woman with a background of social and community interests and responsibilities. In the interview she was asked to describe, in as full a way as possible, the damage Joe had done in the school and the community. With this description, the damage became painfully enlarged in her mind (plants do grow back, broken window panes and torn dresses can be replaced, but this comfort was not allowed to be a part of her review).

Next she was asked to describe Joe "as he used to be"—a reasonably happy well-behaved and actually a decidedly brilliant child. She was repeatedly asked to draw these comparisons between his past and present behavior, more briefly each time, but with a greater highlighting of the essential points. Then she was asked to speculate upon the probable future of Joe both "as he used to be" and as was "quite possible" now in the light of his present behavior. Helpful suggestions were given to aid the mother in drawing sharply contrasting "probable pictures of the future."

After this discussion, she was asked to consider in full the possibilities of what she could do over the weekend and the kind of role she ought to assume with Joe. Since she did not know, this placed her completely in a passive position so the author could offer plans. Her repressed and guilty resentments and hostilities toward her son and his misbehavior were utilized. Every effort was made to redirect them into an anticipation of a satisfying, calculated, deliberate watchfulness in the frustrating of her son's attempts to confirm his sense of insecurity and to prove her ineffectual.

The mother's apparently justified statement that her weight of one hundred and fifty pounds was too great to permit putting it fully on the body of an eight year old child was a major factor in winning the mother's full cooperation. At first this argument was carefully evaded. The mother was helped to systematically marshal all of her objections to the author's proposed plans behind this apparently indisputable argument that her weight was too great to be endured by a child. As she became more entrenched in this defense, a carefully worded

discussion allowed her to wish with increasing desire that she could do the various things the author outlined as he detailed possibilities for the entire weekend.

When the mother seemed to have reached the right degree of emotional readiness, the question of her weight was raised for disposal. She was simply assured that she need not take medical opinion at all but would learn from her son on the morrow that her weight would be inconsequential to him. In fact it would take all of her strength, dexterity, and alertness in addition to her weight to master the situation. She might even lose the contest because of the insufficiency of her weight. (The mother could not analyze the binding significance of this argument so simply presented to her. She was placed in the position of trying to prove that her weight was really too much. To prove this, she would need her son's cooperation and the author was certain that the boy's aggressive patterns would preclude any passive yielding to his mother's weight. In this way, the mother would be taught by the son to disregard her defenses against the author's suggestions, and she would be reinforced in her acceptance of those suggestions by the very violence of his behavior.) As the mother later explained, "The way that bucking bronco threw me around, I knew I would have to settle down to serious business to keep my seat. It just became a question of who was smarter, and I knew I had a real job to do. Then I began to take pleasure in anticipating and meeting his moves. It was almost like a chess game. I certainly learned to admire and respect his determination, and I got an immense satisfaction out of frustrating him as thoroughly as he had frustrated me."

"I had one awfully bad time though. When we came back from the bathroom, and he started to lie down on the floor, he looked at me so pitifully that I wanted to take him in my arms. But I remembered what you said about not accepting surrender because of pity but only when the issue was settled. That's when I knew I had won, so I was awfully careful then to be sure not to let any pity come in. That made the rest of it easy, and I could really understand what I was doing and why."

A LATER REINFORCEMENT

FOR THE NEXT FEW MONTHS, until midsummer, all went well. Then for no apparent reason except an ordinary quarrel with his sister settled unfairly to her advantage, Joe declared quietly but firmly that he did not have "to take that kind of stuff." He said he could "stomp" anybody, particularly the author, and he dared his mother to take him to see the author that very evening. At a loss what to do, his mother brought him to the office immediately. As they entered, she declared somewhat inaccurately that Joe threatened to "stomp" the author's office. Joe was immediately told, disparagingly, that he probably could not stomp the floor hard enough to make it worthwhile. Irately, Joe raised his foot and brought his cowboy boot down hard upon the carpeted floor. He was told, condescendingly, that his effort was really remarkably good for a little eight year old boy and that he probably could repeat it a number of times, but not very many. Joe angrily shouted that he could stomp that hard fifty, a hundred, a thousand times if he wished. Reply was made that he was only eight years old and no matter how angry he was he couldn't stomp a thousand times. In fact he couldn't even stomp hard half that number of times, which would only be five hundred. If he tried, he would soon get

tired, his stomp would get littler and weaker, and he would have to change off to the other leg and rest. Even worse, he was told he couldn't even stand still while he rested without wiggling around and wanting to sit down. If he didn't believe this his could just go right ahead and stomp. When he got all tired out like a little boy, he could rest by standing still until he discovered that he could not even stand still without wiggling and wanting to sit down. With outraged and furious dignity Joe declared his solemn intention of stomping a hole in the floor even if it took a hundred million stomps.

His mother was dismissed with instructions that she was to return in the "square root of four," which she translated to mean "in two hours." In this way, Joe was not informed of the time when she would return, although he recognized that one adult was telling another a specific time. As the office door closed upon his mother, Joe balanced on his right foot and crashed his left foot to the floor. The author assumed a look of astonishment, commenting that the stomp was far better than he had expected of Joe, but he doubted if Joe could keep it up. Certainty was expressed that Joe would soon weaken and then he would discover he couldn't even stand still. Joe contemptuously stomped a few more times before it became possible to disparage his stomp as becoming weaker.

After intensifying his efforts, Joe reached a count of thirty before he realized that he had greatly overestimated his stomping ability. As this realization became evident in Joe's facial expression he was patronizingly offered the privilege of just patting the floor a thousand times with his foot since he really couldn't stand still and rest without wiggling around and wanting to sit down. With desperate dignity, he rejected the floor-patting and declared his intention of standing still. Promptly he assumed a stiff upright position, with his hands at his sides, facing the author. He was immediately shown the desk clock and comment was offered about the slowness of the minute hand and the even greater slowness of the hour hand, despite the seeming rapidity of the ticking of the clock. The author turned to his desk, began to make notes in Joe's case record, and from that he turned to other desk tasks.

Within fifteen minutes Joe was shifting his weight back and forth from one foot to the other, twisting his neck, wiggling his shoulders. When a half hour had passed he was reaching out with his hand, resting some of his weight on the arm of the chair beside which he was standing. However, he quickly withdrew his hand whenever the author seemed about to look up to glance reflectively about the room. After about an hour, the author excused himself temporarily from the office. Joe took full advantage of this, and of several repetitions, never quite getting back into his previous position beside the chair.

When his mother knocked at the office door, Joe was told, "When your mother comes in, do exactly as I tell you." She was admitted and seated, looking wonderingly at Joe as he stood rigidly facing the desk. Signalling silence to the mother, the author turned to Joe and peremptorily commanded, "Joe, show your mother how hard you can still stomp on the floor." Joe was startled but he responded nobly. "Now, Joe, show her how stiff and straight you can stand still." A minute later two more orders were issued, "Mother, this interview between Joe and me is a secret between Joe and me. Joe, don't tell your mother a single thing about what happened in this office. You and I both know, and that's enough. O.K.?"

Both Joe and his mother nodded their heads. She looked a bit mystified; Joe looked thoughtfully pleased. On the trip home Joe was quiet, sitting quite close beside his mother. About halfway home Joe broke the silence by commenting that the author was a "nice doctor." As the mother later stated, this statement had relieved her puzzled mind in some inexplicable way. She neither asked nor was given any explanation of the office events. She knew only that Joe liked, respected, and trusted the author and was glad to see him occasionally in a social or semi-social fashion. Joe's behavior continued to be that of a normal highly intelligent boy who now and then misbehaved in an expected and warrantable fashion.

Two years passed and Joe's mother became engaged. Joe liked the prospective stepfather but asked his mother one demanding question—did the author approve of the man? Assured the author did approve, there was then unquestioning acceptance.

COMMENT

IN THE PROCESS of living, the price of survival is eternal vigilance and the willingness to learn. The sooner one becomes aware of realities and the sooner one adjusts to them, the quicker is the process of adjustment and the happier the experience of living. When one knows the boundaries, restrictions and limitations that govern, then he is free to utilize satisfactorily whatever is available. But in an undefined world where intellectual and emotional fluctuations create an enveloping state of uncertainty that varies from one mood and one moment to the next, there can be no certainty or security. Joe sought to learn what was really strong, secure, and safe and he learned it in the effective way one learns not to kick a stone with the bare foot or to slap a cactus with the bare hands. There are relative values of effort and purposes and rewards, and Joe was given an opportunity to strive, think, assess, compare, appraise, contrast, and to choose. Thereby he could learn and hence could adjust.

Joe is not the only patient on whom this type of therapy has been employed. Over the years there have been a number of comparable instances, some almost identical. In some of these cases, the author's practice of keeping in contact with patients over the years has yielded information repeatedly affirming the value of reality confrontation as a successful measure for defining a ~~secure~~ reality.

Hypnotically Oriented Psychotherapy in Organic Disease*

ORDINARILY, BRAIN DAMAGE with continued evidence of organic changes and destruction presents a seriously difficult problem for psychotherapy. In the following case history, a rather detailed report is given of a multitude of psychological measures, forms of instruction, a direct and indirect use of hypnosis and the manipulation of patterns of responsive behavior and reactions to effect therapeutic gains after a failure of conventional medical and surgical procedures. Considerable detail is given in presenting this case history instead of summarizing it by a simple statement of pertinent medical facts. An effort is made in this more detailed account to give the reader the "feel" of the psychological as well as the organic picture that confronted the author, both of which had a determining role in the therapy he devised.

On July 20, 1955, this 38 year old college-bred woman who had been a brilliant student and who had a master's degree was returning with her husband and three children from a happy vacation trip. On the way, she complained of a developing headache which rapidly grew worse and led to a state of coma.

She was hospitalized and examination disclosed fresh blood in her spinal fluid, a right hemiparesis, a severe aphasia, and an aneurysm at the division of the left internal carotid artery just before its division into the middle and anterior cerebral arteries.

Treatment was conservative until August 2 when her symptoms became much worse and she developed severe hyperalgesia over her entire right side which was diagnosed as a "thalamic syndrome." She was given numerous medications to control her pain, but since she appeared to receive no benefit, surgery was employed August 8 to clamp off the common carotid artery slowly and completely. This relieved her headache and some general symptoms, but left some of her right-sided hemiparesis and hyperesthesia. A month later, she developed extreme pain over her right side which was diagnosed as "central in origin—the thalamic syndrome."

She had regained her ability to walk fairly well although unsteadily, but her increased thalamic syndrome pain and the failure of analgesic medication and sedatives led in a few months to hospitalization in a well-known clinic in January 1956.

General examination there confirmed the previous diagnosis of thalamic syndrome, disclosed numerous additional neurological findings concerning right-sided muscular and sensory dysfunction as well as the aphasia. The recommendation was made that no further laboratory studies or general examinations were needed for diagnostic or other purposes. The previous failure of medications was noted and the final recommendation was made that various untried experimental drugs *might* be considered. The prognosis offered was most unfavorable. This

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was rejected by the family and, in March 1956 at her husband's insistence and because of his wife's completely vegetative course during her illness, she was admitted to another well-known neurological institute. The findings there confirmed the persistence of considerable hemiparesis, severe aphasia, and a continuance of the right-sided hyperalgesia. As in the previous neurological studies, she was found to have normal sensations and normal muscular functioning of the left side of her body. Her thalamic syndrome of generalized right-sided continuous pain and hypersensitivity was considered to have continued, possibly unchanged. No specific recommendations were made and her prognosis was again stated as most unfavorable.

She entered a third neurological institute in June 1956 and underwent neurosurgery for her thalamic syndrome. Report was made to her family physician that "we interrupted the spino-thalamic and quinto-thalamic tracts on the left side and succeeded in producing a definite hemihypalgesia without side effects. This diminished the dysesthesia that she experienced on stroking the skin while the deep diffuse spontaneous pain is still preserved." In further discussion of the patient, mention was made of the frequent association of a vegetative state with thalamic pain, and the increase of the potentials for sensory disturbances following thalamic injury. Her prognosis was given as most unfavorable and mention was made of a possible continued vegetative state.

Therefore, recommendation was made that the patient be discharged and subsequent treatment be instituted by X-ray irradiation of the hypothalamus in an area posterior and dorsal to the sella turcica as a possible means of decreasing her hyperalgesia and perhaps a lessening of the vegetative state.

Upon the patient's return home, it was found that she had not retained the benefit noted immediately after the operation and the neurological institute was again queried. Explanation was given further that such an operation as had been done was often unsuccessful; they again advised X-ray treatment and, in case of failure of that, they stated that they would consider re-operation. On July 3, the institute, in response to further inquiries about increasing symptomatology in the patient, suggested the possibility of further attempts by new trial medications. They obviously were not interested in another operation and considered the situation as hopeless.

Her family physician then sent her to a general practitioner who noted upon physical examination a remarkable anomaly not mentioned in all previous examinations, namely, an exact anatomical midline distribution from the scalp to the perineum of the hyperalgesia of the right side of her body and of the normal sensation on the left side, in addition to her vegetative state and the obvious numerous neurological evidences of brain damage. This peculiar anatomical midline demarcation of normal and abnormal sensations he regarded as an hysterical overlay, especially when the patient nodded her head affirmatively to the effect that the right side of her vagina and rectum were also both continuously painful.

As an outcome of his examination and recommendations, the family and the family physician decided to refer the patient to the author for hypnotherapy since, in the 11 months that had already elapsed, there had occurred only a diminution of her hemiparesis and the development of a profoundly vegetative state from which the patient could be aroused only by unusual stimuli, and then only briefly, despite months of continued effort by her family and numerous friends.

The husband hopefully accepted the suggested referral and the patient was brought to the author on July 14, 1956.

Her husband gave her history; communications sent by the family physician served to give summaries of the patient's four separate hospitalizations: the findings made, the services rendered, and the various respective recommendations suggested. He then proceeded to describe her progressive vegetative decline.

The patient entered the office somewhat unsteadily and haltingly, slumped into the chair, but now and then nodded her head vigorously when her husband stated, that she really wished to get well. She presented a most discouraging appearance. Her hair was just beginning to grow out after the neurosurgery, the right side of her face drooped, all right-sided movements were awkward and she gave good evidence by her behavior and manner that she seemed to be suffering severe pain throughout the entire right side of her body. Examination disclosed that gentle touches were less well tolerated than hard slaps or deep pressure on the right side. It was also noted that she showed marked pain reactions to any stimulus of the right side of her body from the midline of her scalp, down the face and upper chest. Her entire right leg was painful and she nodded her head toward the right when asked if her vagina and rectum were painful. When asked if she meant only the right side of those parts, she nodded affirmatively. Closing of her eyes during tests or testing the sensation of her back and scalp did not alter the rather remarkable exact anatomical midline division of left-sided normal sensations and the hyperalgesia of the right side. A brief test also disclosed a severe alexia which had not been noted in any of the previous examinations. The history, the appearance, and the obvious physical handicaps including her aphasia and alexia left no doubt as to the organic nature of her illness and of actual brain damage, despite the seemingly "hysterical" character of her sensory disturbances which did not allow for the normal interdigitation of sensory nerves from one side of the body to the other.

Inquiry about her clinical course was described by the husband as characterized by brief definite interest on the part of his wife whenever discussion of the possibility of further medical study was mentioned and a hopeful attitude at each clinic, only to be followed by tears, despondency and apparently profound disappointment each time she returned home unimproved. For several months, she had endeavored laboriously to talk to her husband and children and to participate somewhat in the home life. Sometimes it would take her 15 minutes to say haltingly "I can't talk," or, "it hurts," referring to the right side of her body. Repeatedly she tried to take an interest in the visits of numerous friends, especially those of her family physician who was also a close family friend, but she seemed to find this impossible. While her paralysis had lessened greatly, she experienced much difficulty ascending or descending stairs or in stepping backward. The patient indicated that in using stairways, she had to use the banister because her eyes did not seem to measure the steps correctly, and that stepping backward was a slow laborious "thinking" process since her feet would lag behind the backward movement of her body with a fall resulting.

Coldness and increased humidity also increased her physical distress and her right-sided hyperalgesia as well as increasing the right-sided muscular dysfunction, sometimes severely, depending upon the degrees of cold and the humidity.

The patient's reaction to her condition at first was one of severe fright and concern. Her first hospitalization was marked by cooperation and an attitude of full

confidence in her physician and the future. The exacerbation of her symptoms that led to her second hospitalization at a nationally famous clinic was accompanied by a reaction of complete hopefulness and certainty. The recommendation there of trial medications and new drugs and the implied hopelessness of her condition resulted in a feeling of despair and, at the same time, a desperate determination to do everything possible to help herself. She did succeed in improving so far as her hemiparesis was concerned, but ascending and descending stairways, her difficulty in stepping backwards, the cold winter weather in her home state, and her aphasia and alexia constituted serious obstacles. Codeine and empirin and barbiturates were prescribed for her pain and disturbed sleep but increasingly large doses were progressively less effective.

She would struggle vainly and laboriously to talk to her children and husband but her aphasia gave her so helpless a feeling that she despaired each time. Also, she did not recognize what her alexia really was. She merely felt it to be a peculiar visual impairment of blurring although objects in general seemed to be clearly outlined.

She made numerous but futile efforts to respond to the almost daily visits of friends but often found her attention severely distracted from them by surges of pain. There resulted a progressive withdrawal from everything. She would sleep until 10:30 a.m., then arise and take a shower despite the severe pain it caused her. (Her explanation later was that, aside from personal cleanliness, she hoped such a procedure might help her to get accustomed to her constant right-sided hyperesthesia and hyperalgesia.)

She would then eat a combination breakfast and lunch, lie down on the couch, stare at the ceiling and smoke. At 6:00 p.m., she would arise, eat dinner, return to the couch, stare at the ceiling, smoke, and now and then, but with increasing infrequency try to talk to her husband or to listen to her children, but with less and less success. At about 10:00 p.m., she would go to bed.

Her third hospitalization and the possibility that neurosurgery might be done aroused her intense interest and hope which turned rapidly into despair. At the fourth hospitalization, she had cooperated with new confidence and enthusiasm, but was severely disappointed that only hemihypalgesia was secured. She looked forward to a return to the hospital for a second neurosurgical operation for further benefits but with not too hopeful an attitude. The transience of the improvement resulted in black despair and a feeling of hopeless frustration; a feeling that had been present for many months but now seemed to dominate her completely. She passively agreed to see the general practitioner recommended by her family physician but even his discussion of the anatomical midline division of Hoffmann and painful sensations as a hopeful evidence of benefit from hypotherapy did not arouse much active interest. She passively accepted the referral to the author, and, upon meeting him, handed him a slip of paper, reading "Help me;" very poorly, almost illegibly written.

This special personally made plea despite the fact that her husband was with her and the peculiar, seemingly hysterical character of her anatomical midline demarcation of her body sensations impressed the author most favorably as a hopeful indication that the patient would be co-operative in every effort at therapy, that it represented not an hysterical reaction but an extensive somatic over-compensation and such an explanation was made to her, to her husband and written

in a letter to her family physician. To give her some feeling of faith, she was carefully told with intense emphasis and elaboration that such a midline distribution of sensations could very well be interpreted not as hysterical but as an utterly intense compensatory effort by her body to improve and by itself to effect "normal" sensations. This rather specious explanation appeared to give her some faith and hope.

Nevertheless, the problem presented appeared far from hopeful to the author. The first hour's interview exhausted her and she seemed to have lost interest within 15 minutes although her husband did the talking. There was no question of the husband's interest and intense desire to see his wife benefit, but all general understanding indicated that the question of any improvement, if at all possible, would be dependent upon the intensity and persistence of her efforts. Hence, before they left the office, a solemn vow was extracted from the patient to the effect that she would cooperate in every detail with the therapist, and she was warned that "good medicine often tastes bad" and that she would not always enjoy executing therapeutic instructions. She shrugged her shoulders and, after many futile halting attempts, finally managed to say, "I—I—do—what—" and when finally asked if she meant that she would do what was asked of her she nodded her head vigorously.

She was dismissed from the room which she left rather unsteadily to the alarm of her husband and certain arrangements were made with him since his business required prolonged frequent absences. These arrangements included the staying of the patient with a companion who would serve as an assistant in any way the author demanded. A relative who had accompanied the patient volunteered and the interview with her led to the conclusion that she would be an ideal person for any therapeutic plan developed.

Three days of intensive thinking of what to do with an obviously brain-damaged patient with definite residuals of a hemiparesis from a hemorrhage within the skull, a severe aphasia, an alexia, a thalamic syndrome for which the patient had undergone thalamic surgery without recognizable benefit, a history of nearly 11 months' vegetative living in a state of frustration and despair, and an agreed upon poor prognosis by outstanding neurological clinics led to a decision to investigate experimentally the possibilities of helping the patient by combining hypnosis, hypnotic techniques, the patient's own well-developed pattern of frustration, and the implications of Lashley's work, which, within certain wide limits, demonstrated through experiments of cortical destruction upon rats and monkeys that the loss of learning was largely dependent upon the amount of cortical destruction, rather than the location and the learning is carried in the form of neural patterns that in some way preserve their identity in spite of variations in sensory, motor and cortical elements.

The rationale of this decision was that the patient had a well-developed pattern of frustration and despair which, properly employed, could be used constructively as a motivational force in eliciting responses with a strong and probably compelling emotional force and tone leading to actual new learnings of self-expression.

The plan devised was complex and involved; sometimes it varied not only from day to day but within the day itself so that, outside of certain items, the patient never knew what to expect, and even what was done often did not seem to make much sense to her. As a result, the patient was kept in a striving, seeking, frus-

trated, struggling and emotional state in which anger, bewilderment, disgust, impatience and an intense, almost burning desire, to take charge and do things in an orderly and sensible manner became overwhelming. (During the writing of this paper, the patient was interested in what was being included and pointed out that many times, "I hated you horribly, you made me so furious and the madder I got, the more I tried.")

Since the problem was clinical in nature and no conventional therapy was known, therapy had to be experimental, but since it was the patient's welfare at stake there was no way nor attempt at evaluation of the actual usefulness and validity of any single one of the procedures employed. Recognition can only be given to the agreement of competent outstanding clinics in their evaluation of the patient's prognosis as decidedly poor, in fact, hopeless, and the actual eventual outcome of the therapy devised.

Fortunately, the patient's first companion was a highly intelligent, deeply interested, wholly cooperative person with an amazing flow of language and fluence of speech. This was seized upon as the first therapeutic approach, but without acquainting the patient with essential details or purposes.

At the first session, the patient was told by the author with painful exactitude and emphasis that she was to extend herself to the very fullest extent of her physical and mental ability, to listen carefully to each question the author asked her and to make every effort to reply, however arduous she found the task to be. She nodded her head vigorously and she was asked her husband's full name. Before she could complete the first partial efforts to frame his name with her lips, the companion replied with great rapidity with his name, age and birthplace, all of which was gravely recorded by the author as if furnished by the patient.

Equally carefully and slowly, the patient was asked her full name, including her maiden name. Again, the companion, while the patient was struggling with her mouth, gave the name, age, street address, etc. On and on this went, the author gravely and earnestly asking the patient questions, writing down as if they were the patient's replies each of the companion's answers, some of which were purposely approximations or even wrong. Slowly the patient's early wonderment turned to obvious anger and infuriation, especially at the erroneous answers and misinformation.

At the end of the hour, the author remarked casually to the patient, "You're as mad as a wet hen, aren't you?" at which the companion vaguely reassured the author that the patient was not in the least angry. The author continued, "and you really don't want to come back either, do you?" Again the companion solicitously reassured the author while the patient, apparently in an utter fury, with trembling lips, stammered, "I prom—prom—prom—[ised]" and stalked out of the room much more steadily and easily than she had entered.

The next day, as soon as the patient Anne was seated, she was asked for her entire history and immediately, the companion Jane began a rapid fire of Anne's purported personal history such as date and place of birth, schooling, teachers' names, years of attendance at college and much family data, many of which were merely approximations or often in actual error. Anne glared at Jane in increasing anger and also at the author who was hastily making notes and behaving as if it were Anne who was speaking. All of the time, Anne's lips and mouth were struggling to reply, to make corrections, and when the hour was concluded by the

author's announcement of the hour for the next appointment, Anne stalked out of the office even more steadily than she had before, only to be called back and told gravely that a daily schedule of activities had been arranged for her and that the companion's responsibility was to keep a chart on Anne's cooperativeness. Anne nodded her head vigorously and angrily, turned quickly with a single backward step and left, still angry. She was called back and with great intensity, after fixating her gaze rigidly upon the author's face, she was told slowly, repetitiously, that she was to be fully and completely obedient in relation to the schedule. She was then allowed to leave the office, departing at first slowly as if in a trance state and then gradually more briskly. As she turned to leave the office, her appearance and manner indicated that she was in a trance. No effort was made to test her for hypnosis. The reasons for this are no more than the author's clinical experience in securing hypnotic responses from a subject without letting them know at first lest the conscious awareness lead the patient to try to be overhelpful in the therapeutic procedures.

Much later, Anne remarked to the author, "I was sent to you for hypnosis but you never even seemed to try to use hypnosis. When I look back, though, I'm sure you must have had me in a trance many times when I didn't know it. When I get mad at people, I stay mad—maybe for years. But it was different with you. I'd get mad, really mad, but the next day when I was still mad, something in me made me want to come back. *Maybe* that just means you were getting through to my subconscious mind and that was why. Did you have me in a trance a lot of times?" To this question, since she had not made all the progress the author felt to be possible, his standard evasive reply was given, "I like to help patients but I often don't try to explain what I'm doing. The answer to your question is, you can guess any way you want to and either way is all right with me." Such a reply closes the question without answering it, and yet leaves the author free to elicit trance states, or selected or isolated hypnotic phenomena without the patient's awareness of what is really occurring. Much more readily does the patient look upon them as their own conscious intentional effort rather than a passive response act elicited by the operator. Leading the patient to, "See what I (the patient) can do," is much more effective than letting the patient see what things the therapist can do with or to the patient.

Anne was shown by Jane a typewritten schedule but she actually could not read it because of her alexia. After many vain struggles by Anne to read it, Jane read it to her several times, but with specified and different errors. Anne listened intently and her facial expressions indicated that she recognized some of the variously read items and was annoyed. It included bedtime, shower time, meal times, swimming hours, medical appointments, etc., and, most emphatically, the declaration that whatever Jane said or did was to be obeyed scrupulously regardless of what Anne thought, understood, knew, or wanted. There were to be no exceptions of any sort.

This schedule was intended only as another means of stimulating the patient without letting her realize what was happening. Thus, Jane, in spite of the clock in full sight and the radio announcing the time as 9:00 o'clock, declared it to be 10:00 p.m. and "bedtime." Anne sputtered inarticulately and Jane read from the schedule the author's emphatic declaration that Anne was not to dispute or disobey Jane's instruction, all of which were listed on the schedule furnished Jane by the author.

At breakfast time, Anne was awakened early, and asked if she wanted scrambled eggs, toast and coffee. Anne nodded her head affirmatively, then noticed that the clock indicated she was being awakened one and a half hours too soon, and pointed at the clock. It was later learned that she recognized the time of day by the position of the hands, not the clock face numerals. Jane cheerfully remarked that it was a lovely morning and Anne furiously dressed, came angrily into the breakfast room and was dumbfounded to find oatmeal and a lettuce salad for her while Jane had fruit, dry cereal and coffee. Immediately after the breakfast which Anne ate with resentment while Jane cheerfully commented on every topic that came to mind including the author's absolute order that Anne should always clean up her plate, Jane abjectly apologized for not having told Anne to take her shower before breakfast and cheerfully and with much light chatter took Anne back to the bedroom and saw to it that Anne took a shower, completely ignoring all of Anne's efforts to tell Jane by sign language that she had showered, that the shower floor was wet, the towels proved that she had showered, etc. Jane merely chatted fluently on a wealth of topics. Jane's sense of humor and zest in following this type of instructions was extremely helpful and Jane easily used her own ready ingenuity to execute the author's wishes.

At a later session, Anne attempted to communicate effectively by writing a note with her left hand, which she did poorly, and handed it to the author who vainly attempted to read it upside down and gravely handed it to Jane who followed suit. Shrugging of shoulders and helpless looks led Anne to say, "turn, turn, turn." Obediently the author and Jane turned back towards Anne with further shoulder shrugging. Anne burst into tears and said, "Turn paper round."

This was done and the request was read "can she take me dinner out." It was obviously slowly, painfully and laboriously written.

Immediately consent was given, and Anne unhesitating but stumbling asked, "Breakfast lunchtoo." Ready consent was given and Anne looked happy and triumphant. Jane had really enjoyed frustrating Anne at every meal by such measures as presenting her with a carrot instead of a banana while Jane cheerfully ate a banana herself. More and more at meals, now and then, Anne would explosively utter some article of food she wanted and she was always properly rewarded in an entirely casual matter while Jane chattered endlessly on minor casual topics, always interspersing unimportant minor errors to Anne's obvious annoyance. Thus, a birthday present would be suggested for Anne's oldest child when it was the youngest child's birthday. (Incidentally, Anne was greatly underweight but rapidly gained in being obedient about cleaning up her plate.)

The request to go out for meals gave new opportunities for Anne's frustration since Jane drove the automobile. It did not take Anne long to discover the need to start to say "right," meaning "turn right" a block or so in advance, and shortly to say "right" at the intersection since Jane invariably turned the wrong direction or continued straight ahead if not instructed at the proper time.

The menus at the restaurant were another source of instruction and frustration. Since Anne could not read, Jane would order foods that she knew Anne did not like, and always the author inquired if she cleaned up her plate regularly.

Anne attempted to point out to the waitress the items she wished but Jane stopped that by telling the waitress "doctor's orders" and reaching for the menu. Shortly, Anne began pointing out specific items on the menus, but unless she named it, Jane ordered wrongly. This lead shortly to pointing and naming and the get-

ting of some of the foods she wished. Her reading ability soon reached the point where she could read but not always name the item completely. This Jane handled by such a measure as ordering "potato salad" when Anne had pointed to "baked potato" but said only "potato." It was not long before Anne could say "steak me medium," or otherwise make her wishes clear.

Almost from the beginning, the author had taught Anne and Jane the rhyme of "Peas porridge hot, pease porridge cold" and the accompanying hand and arm movements. This game was played regularly with the patient a dozen or two dozen times a day, with Jane reciting the rhyme at first slowly, then with increasing speed. This was done at varying times during the day, sometimes in the middle of a meal or even during a shower bath. Gradually, Jane began to make the wrong movements, eliciting corrections from Anne who would spontaneously correct her by saying irritatedly "no," "no, no," "this, this" or "no, this way." Without comment, Jane would make the correction only to make other errors later. Also Jane began reciting the rhyme with variations in tempo. This occasioned considerable annoyance to Anne who soon began to mouth partially the various words of the rhyme. As Jane noted this, Jane would make a deliberate error in the words and frequently Anne would explosively utter the correct words. Often this game was part of the therapeutic session so that her progress could be noted.

Direct hypnosis seemed to be impossible, therefore Anne was told that it would not be employed. (Many months later, Anne explained, "You really fooled me when you said no hypnosis, that I couldn't be hypnotized.")

Instead, Anne was told in a most painstaking laborious way, holding her attention in a most rigid fixed fashion, "As Jane says that rhyme (Pease Porridge Hot was not the only one employed, there were many others) listen carefully, hear every syllable. Give it your full attention, notice each sound, all vowels and consonants. Remember each word. Think each word. Remember carefully when you were a little girl, when you first learned those rhymes. Where you were sitting or standing? Who taught you? Remember how hard, when you were a little girl, it was to get the words just right. Remember who taught you, where you stood or sat and how you learned the one'sies and the two'sies, how happy you were."

The preceding is a brief but representative example of the indirect method of fixating the patient's attention, practically regressing her in her thinking and remembering to earlier times and situations and literally inducing through attention-fixation a trance state and possibly some regression through careful use of her actual past history obtained through extensive inquiries of the husband of Jane.

Also, very early in therapy an attempt had been made to capitalize upon infantile utterances such as "goo," "da," "ma" as a measure of teaching the patient to talk. This, however, hurt her feelings and served only to emphasize her infantile helplessness in speaking. This was apparently too threatening a measure though Anne later told of doing it when alone because she had "promised" to do as told. Also, the author was the only person who seemed to have hope for her and she wished not only to please but also to get "even" with him for his "silly tricks." Thus, a peculiar state of ambivalence, of mixed dislike and liking existed along with a compelling highly emotional motivation to learn.

Each such session appeared to be followed by improved performance and Jane's enthusiasm waxed anew each time she made her report preceding each session with Anne.

Rhymes were paraphrased, and were fitted into the situation to personalize them

to fit Anne's past experience. Thus mention was made in a session of a certain street address and, at a signal from the author, Jane obligingly in a singsong fashion recited "Annie and Willy sitting in a tree, k-i-s-s-i-n-g." The flush on Anne's face disclosed Anne's full remembrance of that specific childhood experience and the situation was immediately seized upon again to fixate Anne's attention, to emphasize the time, the place, and the difficulties in learning childhood rhymes and the need always to listen to every word and sound. Numerous other little more or less embarrassing experiences of Anne's past were used similarly.

One morning when Jane had prepared an atrocious breakfast for Anne, Anne pushed Jane aside and, as she walked into the office first, said "I'm mad—at you—at her too—she helping—can't help get mad—I'm sorry—much sorry."

Anne's facial expression indicated that she was angry, that she regretted it, that she sensed some legitimate purpose on the part of the author and wished for some kind of reassurance.

In reply, with Jane joining in at once, the following rhyme was chanted to her: "Anne is mad and we are glad and we know how to please her; A bottle of wine to make her shine and (husband's name) to squeeze her."

Anne's reaction was a joyous response "He's coming, he's coming." By coincidence, her husband was coming into town that weekend and the session was spent planning a pleasant weekend for Anne and her husband with an occasional spontaneous word or phrase from Anne suggesting other possibilities.

She was also complimented on the adequacy of her remarks and speech and told amusedly that however angry or mad she got, the worst was yet to come. Her surprising answer came unhesitatingly, "I'm game." She was beginning to realize her improvement.

Jane was then thoroughly drilled in saying the "Pease Porridge" rhyme in a halting, hesitant and stuttering fashion.

She learned this in a phenomenally fast manner, and then Anne, who knew nothing of this special measure, was asked to recite with Jane the Pease Porridge rhyme, however hesitantly she had to do it.

Slowly the two began, Anne slowly, while Jane began to increase the tempo and then to stutter the words in a painfully annoying fashion. At the author, was sternly instructed to listen to Jane and to continue the joint recitation. Anne turned to Jane and her lips and face showed the ideomotor, therefore involuntary and uncontrollable efforts on Anne's part to correct Jane's stutter. On and on, over and over, Jane continued, with Anne's lips twitching and finally Anne was haltingly prompting Jane throughout the whole rhyme. This particular session lasted about two hours and Anne's speech became increasingly better. The same measure was employed with other rhymes and Anne was obviously pleased and confident though often immensely annoyed.

At the next session, Anne made the pitiful plea, "Now Jane is my—best—friend—I—like her—much, very much. She—she—she does everything—you tell her. I don't want to hate her. Do—do—do—do something else."

The author told her sternly, after fixating her attention rigidly by his manner, that he was conducting the therapy, that he would please or displease her as he felt best, but that her obvious improvement warranted a change. She was thereupon instructed to take Jane out to dinner and to put in the order for both of them, asking Jane each item she wished, and doing the ordering, and she was

assured that Jane would eat it, but she was warned to speak slowly, carefully, or that the situation would be reversed. Several evenings later, Jane ate a dinner that was a mess to Anne's obvious intense merriment and the waitress's bewilderment, since both women were obviously amused and sober. (e.g., mustard on lemon meringue pie!)

Interspersed with all of the above therapy was another variety of therapeutic endeavor. This was the beating of time to music, at first to slow music and then to rapid melodies although Anne preferred either classical or dance music such as "The Blue Danube." This beating of time followed various patterns: right hand and left hand separately at intervals, then together, then alternately at every other beat; right and left feet separately at intervals, then together, then left and right feet at alternate beats; left hand and left foot together, then alternate beats for the hand and foot separately; then right hand and right foot similarly; then left hand and right foot jointly, then separately at alternate beats, then both hands and feet together, separately and alternately and alternation of left hand, right foot, with right hand, left foot.

Jane was an excellent taskmaster and arbitrarily interrupted meals, showers, television and radio programs at will to insure "enough practice to satisfy the doctor."

The final step of the measure was to have Anne beat time with the right hand on the left knee, the left hand on the right knee, each time alternating the position of the arms so that first the right arm would be in front of the left, and then vice versa.

As Anne progressed in variously beating time to music, she was instructed to hum, Jane would join in softly singing out-of-time and off-key to Anne's annoyance and then as Anne began singing the tune, Jane dropped out. In fact, Anne's only protection from Jane being out-of-time or off-key was to hum or sing the tune herself.

Family duties took Jane away and in her place was put a shy, young, timid girl, extremely sweet and lovable, unwilling to offend and yet obviously afraid not to do exactly as instructed, and easily flustered by sharp criticism.

Anne's reaction was excellent. She liked the girl immediately, adopted at once a protective maternal role and was constantly springing verbally to the girl's defense at the slightest threat of the author's displeasure directed to the girl.

The excellent progress Anne had made under Jane's care was not only maintained but enhanced by Anne's protective attitude toward the young girl who was exceedingly conscientious despite her timidity and gentleness, and actually just as competent a taskmaster as was Jane.

More and more improvement occurred; Anne was taught to "relax" as a means of resting from the summer heat of Phoenix, and the girl, an excellent hypnotic subject, would post-hypnotically relax with her and in rapport with Anne. Thus, Anne was exposed over and over to the hypnotic situation without ever needing to know it; thus to wonder and question, and perhaps to doubt her own capacity to improve, but to attribute it to passive responses to the author and the tasks he assigned, as he explained at greater detail in preceding paragraphs.

Remembering Jane's conduct at the table, Anne was most careful to spare the young girl the distress Anne felt certain that the girl would experience in obeying the author's instructions if she patted her slice of bread to indicate she wanted the butter and being handed a stalk of celery. Also, Anne soon learned that the girl,

with obvious distress would reply to a patting of a slice of bread and saying haltingly, "But—but—but—" would elicit the verbal response of, "Ask me no but's and I will tell you no lies," or when Anne asked for water by saying "wat—wat—wat" as she lifted her water glass would elicit from the girl a flush of embarrassment and the simple utterance, "What, when, where and why are parts of speech." Thereby Anne readily realized the competence of Jane's reports, the author's own careful observations during therapeutic sessions and the thoroughness of the instructions to this girl who aroused so strongly her protective maternal urges. (Incidentally, the young girl, now a mother of several children and Anne are still the warmest of friends.)

When the author felt that Anne had gained as much as was possible from this protective maternal situation with the girl, a third companion was then secured, after careful survey of possibilities with Anne's husband concerning friends and relatives who might be willing to serve. The woman selected by the author was over-solicitous, worried, mistrustful, very eager, in fact too earnestly eager to execute whatever instructions she had been given about Anne's daily program but she did not like them nor even understand them. These instructions were carefully limited to what Anne could do either easily or with some little effort. For example, the woman was instructed, "When Anne starts to butter a slice of bread, watch carefully, and when it is half buttered, you butter the other half, or if you see Anne reaching for her glass of water (or coffee cup or glass of iced tea) nearly empty, you are to jump up and tell Anne, 'You don't need to say a thing, I'll fill it,' or tell Anne to put lemon in her iced tea, etc." The husband had most emphatically told this companion to obey the author's instructions however nonsensical they might seem, like making Anne take a dozen shower baths in a single day or at 2 a.m. or to put the right shoe on the left foot. (This had been done repeatedly by Jane more than once just before bringing Anne to the office). The first time this happened, Anne angrily extended her feet and pointed at her shoes. The author complimented the appearance of the style of the shoes and the low heels. She shook her head angrily, and the author very rapidly recited the well-known jingle of "goats eat oats, mares eat oats, does eat oats and lambs eat ivy."

After a few moments of confusion, both women recognized the jingle but Anne unwittingly went through a mental process of sorting out words and identifying them from the auditory impression given by the rapid utterance.

Later, when Anne was beginning to correct somewhat her alexia, the same measure was employed somewhat differently. Slowly she was taught to recognize the words of similar jingles such as "Nation mice lender ver says knot" (Nay shun may slender verses not) and then later to be told or to discover the words. This served not only to interest and amuse both women but to effect for Anne possibly a new ordering of her attitude towards words both written and spoken.

This companion's over-solicitude, over-eagerness, and over-helpfulness aggravated Anne intensely and she did every possible thing to prevent being helped. Also, Anne learned to retaliate. Anne herself sought from the author a number of such jingles written out with which to annoy this companion who seemed to lack much of a sense of humor. Yet, Anne was a sweet personality and the general relationship between the two women was good. The companion did recognize that, in some inexplicable way, the author was accomplishing therapy. This companion thus aided greatly in literally compelling more effort on Anne's part in order to

escape the over-solicitous aid and motivating her to still greater effort. Also, this companion could not comprehend what the author was attempting, and was worried and mistrustful of the author. Anne's favorable rapport with the author literally compelled her to demonstrate to this companion that the author's methods, however incomprehensible, were good and most helpful.

However, Anne tired of this companion, and earnestly told the author one day. "She good—do right (obeys author's orders)—not happy job—she have go." This was an exhausting effort at communication because it distressed Anne for two reasons: the discharge of the companion and distress at seeming to oppose the author. Her request was acceded to only after an extensive review over several hours of all the learning she had which had been frustrated by this woman and then the author made clear to Anne some of the author's reasons for considering that frustration as desirable, and also why it was not previously explained to her. Additionally, many amused comments were made by the author over the woman's lack of a sense of humor, of Anne's half-resentful, half-amused plaguing of the woman with jingles and in other way, and he pointed out that the woman always evened the score in some way. Anne did not realize how closely the author checked the daily course of events with that woman and gave instructions to her to help keep the score even and not to disturb the ties of a distant relationship that existed.

Accordingly, both women were much pleased by the author's termination of her employment since a new venture in motivating and learning processes seemed in order.

A fourth companion was then secured after intensive questioning of the husband. She was a young girl, obedient, but on the whole not too interested or impressed by the various procedures and the monotonous reports and activities at the office. Anne was frequently displeased and disgruntled with her, could find no direct fault with her except her lack of enthusiastic intelligent interest. She did repeatedly tell the author that she would be glad when she was sufficiently improved to get rid of "that girl with her mind elsewhere." There was no question of where Anne's "mind was." Anne's interest was in her improvement and she did not like to have anybody, however conscientiously obedient, disinterested. Thus Anne was forced into a position of validating her improvement by being irked, even angered, by her companion's lack of interest and meaningless (to the companion) obedience.

A fifth companion was then secured. This was an older woman, rather absorbed in her own interests, rather "slack about doing things" as Anne complained, and who obviously regarded the author's whole procedure as bizarre, purposeless, and without meaning, even silly and ridiculous. However, care was taken to make sure that she executed her duties and Anne particularly enjoyed the author's assignment of special bizarre tasks. She also enjoyed the older woman's general dislike of the situation and duties and took particular pride in improving even more extensively just to demonstrate to that woman that the author, whom Anne had now come to like greatly, was correct in his methods and that the companion was wrong. (Anne's opinion and emotional reaction to this companion were probably more vital than the author's procedures which were to intensify Anne's own motivation.)

One particular item thought of by Anne at this time was that when she could not say a word, she would "walk around it." The author agreed and pointed out that she could count and stop at the right number when she could not give her son's

age. But Anne herself devised the method, when blocked on a word, for example, "butter," of getting up from the table and elaborately walking around in a tortuous path about the furniture in the room, sitting down and saying, "Pass the yellow stuff there," pointing to it. What Anne did not realize was that, when blocked in saying a word and then reacting by a tortuous path in and out and around the furniture, she was indirectly and unwittingly adding to her vocabulary and lengthening her sentences. Thus, blocked on saying "butter," she had, in the procedure she devised, to say to herself mentally without realizing it, "I must get up and first walk around that chair and then over to the end table and past the davenport and open and close the refrigerator door and then go back to the table and say please pass that yellow stuff." That this is what actually did occur is not known nor was any inquiry made. She had suffered brain damage and she was improving by nonconventional methods. Experimentally, it would have been scientific to have inquired of her, but the goal was one of therapy, not of controlled scientific experimentation. However, a number of normal subjects were deliberately asked to do as Anne and her companion had described the walking about the room in a random tortuous path. This done, they were asked to relate the thinking they had done as they did so. Naturally they prefaced their explanation with, "I couldn't help wondering what your purpose was, but I decided to walk around the coffee table, and then over to the bookcase, and then around the throw rug and then past the radio." Anne's aphasia was a motor aphasia. Presumably her thinking processes were like those of the normal subjects. At all events, she would return to the table with some such remark as "Pass that yellow stuff there," instead of limiting her utterances to "Butter, pass," or "yellow stuff, pass."

This particular companion was always bored by the sessions in the office, did not try to conceal the fact, and the author took advantage with Anne's half-resentful half-amused attitude toward the companion, to delight in having them go through the various "exercises" that had been assigned. Particularly did Anne enjoy the author's discounting of her inability to talk originally by the bold assertion, which the woman resented, that any little baby could say "goo" and "ga" and "da" and so could Anne have done so. These particular exercises Anne had resented at first and they had been used most sparingly in the office, though secretly by Anne, but she enjoyed going through them with this companion, even enlarging them from meaningless syllables to baby talk, a measure Anne did deliberately and without prompting to irritate the companion for her criticisms of the author; an excellent constructive example of such is: En-ee-bah-dee—anybody.

One other step that seemed to the author of importance was the institution of a measure to correct, if possible, the alexia. This the patient was almost irrationally certain could not be corrected despite considerable progress with the jingles and hence a completely indirect measure was taken. She was furnished pencils and paper, and told to sign her name. It was reasoned that, since her aphasia involved motor elements and visual word memory and that the alexia was a matter of visual perception, a motor skill might be employed, one that was not related as such to the ability to read but one which is naturally followed or accompanied by reading.

She signed her name in an almost illegible fashion. She could spell her name verbally, but could not identify the letters when only one letter at a time was exposed to her. She could recognize her name and her husband's nickname. She could not recognize her last name nor even such a simple word as "cat."

She was instructed to take a pencil in each hand, and holding the pencils in the correct writing fashion, simultaneously to write with both hands her own name. She spontaneously noted that her left hand wrote backwards and was spontaneously interested in figuring out the probably individual letters in both writings since the right and left hand writings compared fairly well because of the poor writing caused by the residuals of the hemiparesis of the right arm.

This was the one special exercise the author devised which the patient delightedly modified to confound the author while still abiding by instructions. The assignments were her name, those of her family, her birthplace and then, knowing that she was an ardent baseball fan, she was instructed to write simultaneously with both hands numerous pages filled with the statement that she hoped her favorite team would lose each game. This she did reluctantly, in fact, resentfully. Then one day, she entered the office with a broad triumphant smile with a whole handful of sheets of paper covered with markedly improved script. Apprised by Anne's facial expression, the sheets were accepted most carefully with only a casual careless look. At first, disappointment, then fury showed in Anne's face, whereupon she demanded imperiously of the author, "You read them." The reply was given that the author had trouble enough reading his own script without attempting someone else's. Since her secret plan was so easily defeated, Ann furiously snatched the papers back and read freely, "I hope the X team wins. I hope other teams all lose." In all, she had written and read aloud easily a dozen different statements negating the author's original demand that her team lose, etc.

She was most elated over this and the author promptly expressed his demands that she write various uncomplimentary things in relation to persons or objects she liked. She took much pleasure in defiance of this by writing right and left-handedly simultaneously complimentary remarks and, with less and less halting speech, reading them. She enjoyed this defiance greatly as well as taking much pride in her improved handwriting and ability to identify individual letter and words.

A newspaper was shown her and she was asked to read an account of her favorite baseball team. She futilely attempted to do so, whereupon the author read it aloud to her, actually paraphrasing it into a most derogatory account. She snatched the paper from the author and haltingly and imperfectly reread the article correctly, half amused, half angry at the author. This measure served to convince her that she could read "if you make me real mad."

There were, of course, numerous other measures, essentially variations of those already described, that were employed to prevent boredom or slackness and to keep the patient continuously alert and yet annoyed, frustrated, and at the same time hopeful and pleased by recognizable yet often not immediately realized progress.

By November 1956, she was sent home for two months and returned for further therapy in January and February. She had lost considerable ground which she attributed to the coldness of her home state. Improvement was rapid and quickly surpassed the previous gains.

She returned home again and her friends noted no aphasia, although the family physician noted occasional evidences. The alexia persisted, although considerably decreased. Weekly letters from her were demanded, a laborious task, and some of these were arbitrarily sent back with peremptory demands for cor-

rections without the errors being marked. She resented this disdainful handling of her correspondence but usually found the errors, corrected them and would then append the statement, "This makes this week's letter."

No value was accorded to corrected letters if she overlooked an error and thus she was penalized by having to find the overlooked error and to write another letter in addition. Thus she was forced into a careful reading behavior along with her motor performance of writing since intellectually she could spell mentally if not verbally.

Very slowly, she began to read short stories to her youngest child. However, her alexia is far from being corrected but she can and does read some of the newspaper.

She had been exhibited to a considerable number of physicians as a former patient and has joined the author in challenging them to guess her original diagnosis. Almost all have noted that her right leg is slightly edematous and have offered a diagnosis of thrombophlebitis. On one such occasion, she laughingly replied, "You're right, only you are wrong. Just listen to me try to say that word and you will know." She then attempted to say "thrombophlebitis" and laughed at the guess of "speech defect," saying, "No, aphasia."

She still is very slightly awkward from hemiparesis, experiences considerable hypersensitivity and some deep pain of the right side; and cold weather and high humidity greatly increase the deep spontaneous pain. She is still taking a minimum dosage of codeine and empirin and an occasional sedative. It was she who persuaded her husband to move to Arizona but to Tucson, not Phoenix where the author lives. Thus she is too far away for any emergency calls but she does see the author for occasional visits at irregular intervals of one to four months. For a family physician, she was referred to an internist in Tucson for whom she developed an immediate respect and liking.

She follows a good general daily program except on unusually chilly winter days. That period of the year, she is most likely to want to see the author once a month or two, as "insurance that I am staying all right and it is just the cold that makes things more difficult." She entertains freely, drives the family car, picnics in the mountains with her family, does the family shopping, but has a housekeeper do routine household tasks.

The specific difficulty in stepping backward had been corrected by having her learn to dance, something she had always enjoyed, and which the first two companions had enjoyed with her, the first companion with considerable difficulty, the second with ease, while no trouble was later experienced by the patient in dancing with her husband.

Her stair climbing and descending difficulty still persists but the move away from her home state permitted living in a one-level house. However, a climb of 2, 3 and even 4 or 5 steps is easily managed by the measure of carefully noting of the number and height of the steps. A larger number necessitates actual assistance.

Cold, if intense, and high humidity, besides increasing the symptoms of her thalamic syndrome, have the peculiar effect of decreasing her sense of taste. This was confirmed by her over- and underseasoning of foods, an item of fact discovered by her family since she is an excellent cook. At such times she carefully loads her plate and "cleans it up" so that she will not lose weight because of a definite lack of appetite.

DISCUSSION

To discuss the therapy employed and its rationale is difficult. The patient had been rendered suddenly and distressingly helpless at a most happy period of her life but without any loss of her intellectual capacities. The helplessness of her situation, the frequent surges of hope occasioned by trips to nationally famous clinics, the black and hopeless despair that followed, the meaningless, well-intentioned, obviously false and uninformed assurances by all of her friends, associates and her relatives that "everything is coming along fine," left her more hopeless and despairing than ever, to say nothing of her actual pain and physical difficulties. She recognized her vegetative state, felt helpless to do anything about it and found herself facing a completely wretched future for which she could see no remedy nor anyway to hope for one.

She knew that the diagnosis of "hysterical reaction to her partial hemiparesis" was wrong because she knew she did have pain explained to her as "thalamic syndrome" but she did recognize that the general practitioner actually had made a finding he could recognize as new and different from any made by all the other physicians and that he was obviously positive that it signified hope. This had encouraged her briefly, but then, all of her hopes had been dashed on previous occasions of optimism.

She had consented to see the author, was again encouraged by his interest in the peculiar midline sensory demarcation and his prompt discovery of her alexia which he seemed to recognize understandingly although none of the famous clinics had seemed to pay any attention to it (nor do their reports make any mention of it). Next she was, as she later explained "fearfully and powerfully" affected by the author's frank and open statement in her presence that she was a totally hopeless case unless she wanted, *really wanted*, to get well, that every possible opportunity would be given to her, that no effort would be made to spare her feelings at the sacrifice of her welfare and that the case would be accepted only under an absolute promise of full cooperation despite the fact that therapy would not seem reasonable, nor even sensible nor considerate; that all reasonable conventional things had been done to no avail for an intelligent adult now reduced to a state bordering on infantile incapacity. Therefore, she would be handled and treated accordingly, without regard for her intelligence, her master's degree, or her social background.

Therapy would be oriented about her helpless condition and use would be made of every possible pattern of reaction and response that she had retained without regard for banal social convention, and a demand was made that she give her solemn promise to abide by whatever therapeutic measures the author might develop. It was pointed out simply and emphatically that to date, all conventional therapies had failed, and there would be no loss entailed by new measures, and that a therapy devised to meet the actual reality she represented instead of the lost realities of the past might conceivably serve a useful purpose. (Later the patient stated that this frank nonreassuring offer to give help but a refusal to promise it influenced her to take hope and to give and to keep her promise of cooperation despite the anger, frustration, and displeasure the author's methods occasioned. As she explained later, "It didn't make sense most of the time but I couldn't help noticing that I was doing better. But you did make me just aw-

ful mad and after awhile I discovered it (being angry) helped. Then I didn't mind how mad you got me. But it was awful at first."

Although it cannot be positively stated as factual, one may speculate that the treatment accomplished gains for the patient according to the following utilization of procedures:

1. Her vegetative state was corrected not by sympathetic care and attention nor by patient instruction, but was rendered intolerable by cheerful and obvious stupidity intentionally executed that refuted every intellectual understanding she possessed, and stimulated an actual desire to understand and to learn. It intensified her need to avoid such unmistakably intentional misunderstandings, which then led to a frustration state quite different in character from the frustration to which she had become so well accustomed. Instead, it was a frustration that compelled her to take action to avoid it by one means or another and there was no fixed, set or rigid pathway, nor any opportunity for passive withdrawal by which she could escape. Each new measure employed by the author placed slightly new and different demands upon her, most of which frustrated her in some new and different way, and in a fashion which was intended to lead to effort rather than to vegetative state. In fact "cleaning up her plate" when served weird combinations of good nutritious foods often served to give expression to her innermost emotions of resentment "which somehow made me feel better."

The emotions accompanying each new demand upon her were something more meaningful than useless despondency and the desperation of the past. There was a desire to retaliate, to do something, to change things and for varied reasons: anger, amusement, bewilderment, confusion, disgust, etc. There was no one dominant emotional state causing a generalized rejection of things or a withdrawal as had derived from her despair and despondency and depression over her incapacities.

2. General knowledge indicates that verbal learning is based upon a variety of other experiential processes. (Consider children learning to count. They can learn by rote repetition to count to 10 accurately. Given a good sample of children and various methods employed to teach them to count by verbal instruction and, at the same time having them touch one by one the instructor's fingers on the nails in proper sequence from one little finger to the next makes the task easier. Hearing, seeing, tactile experience and verbalization all combine to facilitate the process of verbal learning. Transfer then to a task of counting the fingers without touching them is then easily accomplished. Then the child can be given the task of counting the fingers with the hands turned palms up and counting in sequence from one thumb to the next but without touching the fingers. The task suddenly is more difficult for the child unless he is allowed to touch the fingers. Then the hands can be held up, the palm of one, the back of the other, facing the child and he counts readily without touching the fingers.)

Transfer of this learning to the counting of 10 marbles in sequence is then easy. Then place one large marble anywhere but usually best at the end, in the row of marbles and ask the child to count them visually. The answer too frequently is "9 little marbles and a great big one," not the simple reply of 10. Then have that child count the marbles by touching each as he looks at them and counts and the answer is, "10, but one is big."

Also, how does one learn to read without moving the lips? And the rhythmic person (as the author knows by personal experience and inquiries of similar

persons) has intense difficulty in counting the rapid rhythmical drumming on a table but can count more rapidly and more accurately when a small handful of marbles are dropped from the hand to a table top in a rapid but nonrhythmic fashion.

Throughout therapy, innumerable items and speculative ideas were kept in mind and revised at each session to fit any immediate changes in the patient's situation and to add new or to arouse old associations to all relearnings and any new learnings.

The Pease Porridge rhyme was ideal for this: It demanded attentiveness, an anticipatory span of attention, coordination of hand, arm and eye movements, auditory attention, an active motor set and participation, and presumably it would arouse some ideomotor and ideosensory and hence involuntary speech movements, possibly, even probably, inducing subliminal speech.

Certainly, the painful stuttering so deliberately and well though laboriously done by her companion would serve to and almost be certain to elicit ideomotor and ideosensory speech experiences. Consider the overwhelming natural tendency to say words for a stutterer; these would include quite possibly, even probably, subliminal speech and affectively reinforced speech memories, particularly, associated motor memories. Also it would serve to elicit strong self-protection tendencies, a desire to get away from something displeasing to the self—even as her speech problems were displeasing to her and it demonstrated that there is an escape from a speech problem—an item of vital general significance.

3. The rhythmic beating of time to music and listening while beating time to lilting songs would lead to ideomotor and ideosensory speech experience, and the peculiar and complex combinations of right and left sided beating of time and the constant shifting of the beating pattern from left to right and vice versa were deemed to aid in the development of new alternative neurological pathways of response to auditory stimuli. Additionally, the tendency to hum, to anticipate the next words of the song already heard many times, the tendency to join in the singing, and the frustration by the companion's out-of-time humming and off-key singing appeared to offer a most compelling eagerness and motivation to use her vocal cords out of sheer self-protection, since she did have an excellent ear for music.

4. The patient's markedly underweight state and the authoritative demand that "she clean up her plate" served not only to correct her weight; an item she could sense and appreciate as a visible proof of her improvement but put her into an eager state of mind, wanting to have her choice of food instead of the nutritious but unwanted selections by her companion. Her appetite; her long-established tastes in food and her need to protect them served to motivate her desire to speak and also to read the menu so that she could be certain of having her wishes met.

5. The alexia, a distinct problem in itself, is nevertheless related closely to speech. (Watch little children's lips as they try to read silently.) Thus, the restaurant menu served the dual purpose of compelling not only speech but reading also. (As reported by Anne later, the first restaurant meal ordered for her, taking advantage of her hopeless speech condition and alexia, aroused not only her anger, but a tremendous desire for doing a turn-about on Jane, something she planned for weeks before the opportunity arose.)

Thus the diet frustration, despite her gain in weight, filled her not only with

a wealth of mixed emotions but literally forced her into a position anticipative of the correction, but not so recognized, of both the alexia and the aphasia as a means to an end rather than an end in itself.

6. The selection of the first companion was a fortunate act of fate, but it suggested the use of different companions, each to call forth progressively and more assertively the various natural patterns of response that characterized Anne. The first companion by her quickness in seizing upon situations and taking advantage of them while obeying orders forced Anne from a state of frustration and black despair into a state of intense desire to frustrate the companion—hence to do and not to yield hopelessly.

The second companion was picked as a measure of evoking Anne's own deep maternal urges. She missed her family greatly, seized upon the second companion as a substitute, and to the very extent of her ability attempted to do things to prevent the author from rebuking this girl. Also, the girl was a good hypnotic subject and could be given post-hypnotic suggestions creative of special situations such as the radiating joy at every success of Anne's and her eyes brimming with tears whenever she mistook Anne's helpless pointing at something instead of naming it and therefore proffering something wrong which Anne's vigorous negative shake of her head disclosed it not to be wanted. Thus, by virtue of the girl's excellent post-hypnotic amnesias, she and Anne would attribute events to situational developments which could not appear in any way to have stemmed from the author's instructions. Also Anne, in her maternalism would have another type of aversion toward her difficulty, an aversion having its origin in its distress not to her but to someone else. Thus, a set of circumstances could be created in which Anne could take charge spontaneously and not feel that it had been arranged by the author. Anne knew full well that Jane and the author worked hand in hand, but with this girl Anne was inspired to take charge herself. Additionally, the afternoon siesta which post-hypnotic suggestion made so easy for the girl served to set an almost irresistible example leading to "joint relaxation" and Anne delighted in following the example set with the development of an intensely warm interpersonal situation in which Anne was the dominant personality which was not hitherto the case with Anne's friends during her illness at Hottie nor with Jane. And she is definitely a strong character.

7. The third companion served the significant purpose of compelling Anne to reject emphatically any effort to over-solicitude and to compel a determination to be as self-reliant as possible. This continued unrecognized the work initiated by the previous girl and compelled Anne to strengthen it.

8. The fourth girl, by virtue of her feeling of boredom and disinterest, served a most important role of compelling Anne to recognize that much was yet to be done, that much had already been accomplished and that she herself would have to undertake the responsibility to do all that was requested and even more.

9. The fifth and last companion, absorbed in her own thoughts and troubles, with her tendency to scorn and belittle the author, was actually exceedingly helpful. She reinforced powerfully Anne's assumption of self-responsibility, placed Anne in the position of appraising and recognizing the extent of her improvement, and aroused intense emotional desires to protect the author from criticism of his methods. Thereby Anne unwittingly placed herself in the position of not only justifying the methods but the forcing of recognition by this companion that the methods were right and that she was continuing to improve.

10. The handwriting exercise in itself was an added special measure of peculiar complexity. Anne knew that she could write only illegibly, and the simultaneous right and left handed writing intrigued her curiosity and interest.

At first her left hand wrote more legibly than her right. This pleased her, but although she did not realize it, it also forced her into taking *a reading attitude* toward her handwriting. Then having her write derogatory things about her baseball team gave her the golden opportunity to retaliate with much amusement against the author for all the things he had done directly or indirectly against her. Thus was established an easy comfortable interpersonal feeling between two adults, rather than a physician-invalid relationship.

As she continued the writing, she realized progressively her capacity to read more and more and this was assumed by her to be her own spontaneous development. Thus, her faith in herself was greatly strengthened. The impersonally critical treatment of her weekly letters compelled her not only to read while writing them but to read them with searching care *to correct errors*.

She enjoyed receiving letters but cold impersonal criticism of errors noted but not marked in otherwise friendly newsy letters, coupled with a peremptory demand reminiscent of her original promise to the author compelled her not only to read while writing them but to read with searching care to prevent errors. Thus, the return of her letters with a peremptory demand for corrections not indicated for her gave her a golden opportunity to retaliate by searching out the errors and then returning the corrected letter with the triumphant statement that it was the letter for the current week. And one or two occasions in which she missed errors she had made taught her to insure her triumphant escape from a letter every week because a letter twice returned for correction was accorded no value. Moreover, Anne was strongly competitive and her need to win of utmost value in this manner of dealing with her letters. (She now dictates letters by tape recorder—it is more convenient since there are residuals of hemiparesis in her right arm and her alexia is far from corrected so far as writing is concerned).

11. The recitation of childhood rhymes, little experiences from her childhood, embarrassing or semi-embarrassing incidents, served not only to awaken past memories but to reinforce all associated mechanisms of behavior and learning responses.

12. It is true that the patient's progress might be attributed simply to the increased individual attention she received. However, it is also true that she received an immense amount of individual attention from numerous relatives, friends and her family, all of which did not prevent the development of a vegetative state. Also, she received extensive and highly skilled nursing and medical care and attention, all to no avail. But all such care and attention was based upon ~~confidence~~, sympathy, fear, worry, helpful protective attitudes and a despairing ~~concept~~ of her as helplessly and hopelessly invalided, even despite the diminution of ~~her~~ hemiparesis. Such attention was always accompanied by sympathetic and encouraging assurances in the face of obvious and unmistakable disability and therefore was patently false and expressive only of the wishes of others and an unintentional emphasis upon her invalidism. The patient's *own retained intellectual capacities* permitted her recognition of the falsity of the assurances, and the significance of the sympathetic concern as actual expectation of a continuance of her invalidism. As was mentioned early in her medical history, she had a masters degree and possessed of excellent intelligence.

The therapeutic attention devised for her and described in this report was of an-

other character entirely. There was no fear, concern, anxiety or sympathy offered. Instead there was literally a peremptory demand for cooperation and the exacting of such a promise. Instead of gentleness and sympathetic consideration, there was the annoying assignment of seemingly meaningless tasks and the deliberate devising of situations which would lead to feelings of frustration accompanied by intense emotions of a motivating character rather than of hopeless despair. She was not encouraged to talk but a situation was created that could lead easily to involuntary ideomotor efforts of speech and quite possibly to subliminal speech. Frustration was used deliberately to prevent despair by compelling the patient, in self-protection, to strive to secure some satisfaction of ordinary, reasonable, and legitimate desires. For example, being handed a carrot instead of a banana not only infuriated her but intensified tremendously her desire to talk and a need to reject her helplessness so that she might retaliate in kind, as indeed she later did. Yet she had not been asked to talk, which she knew she could not do. Instead, a situation was created which, through the intensity and welter of her emotions, would impel her to seek some measure or means of meeting her wishes and needs. Neither was she asked to learn to step backward without falling. Instead, her maternal urge to protect the second companion from the author's seeming displeasure about the companion's inability to dance well was used. (A post-hypnotic suggestion to the companion insured a certain awkwardness.) Hence, stepping backward easily and readily was only an incidental and unrecognized part of her emotional relationship to that young girl.

Likewise, the simultaneous writing with her right and left hands, especially of statements offensive to her personal loyalties, could not be recognized by the patient as a form of speech corrective of alexia. To her, it was a motor task, repetitious and monotonous and one that inspired her to confound and defy the author finally by angrily reading aloud the exact opposite of what he had deliberately misread.

So it was with all of the other individual attentions she received. They were all deliberately and intentionally controlled and directed toward the evoking of whatever capacities for all kinds of responses which she might have or could develop, without regard for courtesies or social niceties but only for whatever responsive behavior might be conducive to restoration of previous patterns of normal behavior. However, the nature of her specific reactions were not and could not always be anticipated. Her welfare was the governing purpose of the therapy devised, not sympathy, consideration nor even common courtesy. Perhaps the best example to illustrate this was the occasion on which Anne had laboriously, slowly and with apparent distress crossed her legs in an effort to relieve her deep spontaneous pain. When she had completed this difficult task, the author amusingly chanted the old childhood rhyme, "I see London, I see France, I see somebody's underpants." The celerity and ease with which Anne embarrassedly uncrossed her legs with no apparent recognition of painful feelings was a startling revelation both to herself and to her companion. Later Anne recalled this incident by saying haltingly, "member—underpants—move—move leg fast—no hurt."

Numerous other little incidents like this, conducive to strong emotions and automatic responses, unquestionably served to restore and to reinforce normal responsive patterns of behavior and to compel a confident realization of her own recovery of latent capacities of response awaiting adequate stimulation.

13. Hypnosis and hypnotic techniques, usually indirectly and unexpectedly,

were frequently employed to arrest and to fixate her attention rigidly upon therapeutic ideas and understandings. By so using hypnosis, her attention was directed and controlled and possible demands for conventionally "sensible" instructions were forestalled. The liking she had developed for the author, the slow but continuing progress which she could see and sense served, with the hypnosis, to prevent an intermingling in her conscious daily thinking of conscious doubts, fears, and anxieties and uncertainties with the author's carefully given helpful ideas. Instead, she became the author's ally and any questioning doubts were left to the companions.

Even now, seven years later, she feels "different" in the office and much of her behavior is highly suggestive of a hypnotic state. (For therapeutic reasons, no effort is made to test her.) However, this seemingly hypnotic behavior is absent in the waiting room and she socializes easily and well with the author and others. Another comment in this connection is waranted. About a year ago, she met the author at the Tucson airport and took him to her home for some additional therapy. However, she first acted as a hostess, displaying her home and her garden and making inquiries of a purely social character for about an hour. Then when the author remarked, "I believe you have some questions to ask me," there developed a fixed rigid attentiveness and a seemingly unawareness for her surroundings similar to that of her behavior in the office.

14. In brief, the therapy developed to meet Anne's manifold problems may be best summarized as: (a) The devising of measures to negate her passive withdrawal and her vegetative state dominated by a sense of hopeless, helpless frustration; (b) Employment of measures, sometimes directly, sometimes indirectly, capitalizing upon her frustration and despair by employing measures which might conceivably make use of resulting strong emotional drives as a basis of evoking a great variety of response patterns and of motivating learning; (c) Arousal of motivational forces and memories that had played a part in her development from infancy to normal adulthood; and (d) Inducing and compelling an open-mindedness of mental receptiveness to new, inexplicable, curiosity-evoking ideas in setting causing the patient to look forward with hopeful anticipation and not to expand her energies in despondent despair over the past. Always the ever-changing challenging activities of the present and the future occupied her mind and thus there existed a mental frame of reference conducive to recovery of lost learnings and the development of new learnings, possibly by new and alternative associative neural pathways.

AN ADDENDUM*

In the report presented the fact was not specifically emphasized but is nevertheless obvious that underlying the entire procedure was the utilization of the patient's emotions. Each new measure in some manner elicited emotional reactions, attitudes and states, sometimes pleasant, but more often of special personal displeasure, and these were employed to intensify and promote her learnings and to stimulate her to greater effort. In some degree, and progressively more and more so, she recognized this through the therapeutic course, and endured it willingly though with frequent reluctance.

* *Amer. J. Cl. Hypn.* 1964, 6, 361-362.

At that time thought was only given to the possible effect upon the patient of any sudden catastrophic emotion in relation to family matters of illness and death, which were dealt with adequately as actual probabilities. The patient proved able to cope with this type of stress. However, there was no thought of provision for an overwhelming emotion at a catastrophe of national importance such as she experienced at the announcement of the assassination of President Kennedy. She was an ardent supporter and admirer of the late President and the announcement of his death had a sudden and detrimental effect upon her. Within a few hours the pain of her thalamic syndrome had increased greatly; she experienced a marked sense of weakness and motor instability; within three days she lost 20 pounds and found the process of eating a laborious task, "I swallow a few bites, then something happens—my appetite—it's gone—I try to eat another bite—I get sick to stomach—try to eat another bite—lose everything. I just eat a bite or two—wait a while—try to eat another—eat all time little bit—mustn't lose weight—but lose fast—awful fast—I'm so weak—so tired—so much pain—no sleep—almost like when I came to you—I'm scared but still I just want to lie down and give up."

She was brought to see the author after the passage of one week of progressive deterioration. After securing the history, a rapid testing for speech and reading ability was made which showed no appreciable losses. Her motor ability and ease of walking were definitely impaired. Her right-sided hyperalgesia was severely increased.

Her interest in food, once an item of intense desire and frustration, was gone. Even slight discussion of her previously favorite food elicited reactions of nausea.

Her previous companions during therapy were indirectly mentioned in a seemingly casual conversation without arousing interest in her, except for the mention of the second companion, the shy timid girl who had stirred her protective maternal emotions. She otherwise showed marked indifference or an astonishing dislike, but this dislike was found to be related to the course of events in their later lives since the time that they had been her companions. (She and her husband had maintained casual contact with them). More astonishing was the change in her emotional attitude toward her husband and children. Contrary to her usual maternal concern, she showed disinterest in all except her youngest child but even this was barely more than mild interest. Her attitude toward her husband was cold, unsympathetic and indifferent, seriously in contrast to the vividly warm affection in which she held him.

Her husband's spontaneous statement was most informative. It was, "You have just got to do something. I went through this once before, losing hope and faith, just watching her go down hill for almost a year. Except for being able to talk, she's just about where she was when we first brought her to you (1956). I can't go through that again and she can't either. Now do something and do it fast. Make her eat. She tries but she can't. Maybe you can teach her some way, but do it fast. Make her feel alive and real."

In lieu of any well formulated or even carefully considered plans, and because the patient was rapidly becoming listless and apathetic, the husband was dismissed and the author began an exhaustive but vivid discussion of the assassi-

nation, and its possible immediate meanings and those of historical perspective. The patient's interest was slowly but effectively aroused, at first by a deliberate use of morbidness in the discussion, and then was maintained by as thoughtful and meaningful a discussion as could be offered.

Gradually a shift was made to the youngest child's interest in the same topic, and then to the question of that child's tendency toward overweight and faulty and demanding eating habits, particularly of foods with high carbohydrate content. Then, by extremely cautious indirection, the patient was slowly but intensely inspired (but this was seemingly not noticed by her) to set that child a pattern of table behavioral conduct of such tact and good example as to lead him effectively away from previous indulgence in a large portion of dessert before meat and vegetables and toward a proper approach to kinds and qualities of food. All this was done in a guarded, prolonged and indirect fashion and the patient finally left the office more stable physically than she had entered it. Her purposeful attitude and almost preëmptory demand that her husband hurry up and get home so that she could prepare dinner for the youngest child was in marked contrast to her behavior upon arrival.

Her husband was promptly and secretly told to be matter-of-fact and non-committal, and to make neither inquiries nor suggestions.

Subsequent information disclosed that the patient had been making excellent progress, her thalamic pain had again decreased to its previous low level, and there is little evidence of untoward reaction to the national tragedy. Apparently the appeal to her maternal instinct, so effective in relation to her second companion, again proved a remarkably effective measure of reviving her previous learnings and attitudes.

A month later, the patient was again in good condition although she had not yet gained back all of her weight loss. Her appetite was excellent, but it was noted by her husband that now and then she would seem to have momentary difficulty in swallowing. At such times, her husband reported, "Her face gets blank, she seems to forget where she is, doesn't even seem to see us, then she seems to wake up and she doesn't know what just happened to her and keeps on eating. I suppose she just goes into a momentary trance, so none of us say a thing. But she is really doing something about the boy's eating."

"She is not upset anymore, and her pain is greatly reduced. I'd say she's back to where she was except she still lacks 10 pounds, maybe more. She is O.K."

In all, less than 4 continuous therapeutic hours had been spent with her.

DISCUSSION

The significance of emotional trauma to individual adjustment is universally recognized. But it is noteworthy that in this particular case of the effects of organic brain damage, corrected in large part by new learnings having marked personal emotional components, the adjustment was seriously threatened by a national tragedy with strong personal emotional overtones, even though a death in her immediate family and two other serious family disasters had not caused more than normal grief.

The Burden of Responsibility in Effective Psychotherapy*

THE FOLLOWING CASE material is presented since it offers so concisely and clearly a *modus operandi* in hypnotherapy with a type of patients who have had long experience in failing to derive desired benefits from extensive traditionally oriented therapy. The three persons reported upon are typical of dozens of others that this author has seen over the years and the results obtained have been remarkably good despite the fact that the patients were seen on only one occasion for an hour or two.

In each instance hypnosis was used for the specific purpose of placing the burden of responsibility for therapeutic results upon the patient himself after he himself had reached a definite conclusion that therapy would not help and that a last resort would be a hypnotic "miracle." In this author's understanding of psychotherapy, if a patient wants to believe in a "hypnotic miracle" so strongly that he will undertake the responsibility of making a recovery by virtue of his own actual behavior and continue that recovery, he is at liberty to do so under whatever guise he chooses, but neither the author nor the reader is obliged to regard the success of the therapy as a hypnotic miracle. The hypnosis was used solely as a modality by means of which to secure their co-operation in accepting the therapy they wanted. In other words, they were induced by hypnosis to acknowledge and act upon their own personal responsibility for successfully accepting the previously sought and offered but actually rejected therapy.

CASES 1 AND 2

A TELEPHONE CALL was received in the office from a man who stated that he wanted an appointment. He refused to give any reason except that it was for a proper medical reason he preferred to explain in person.

At the interview, the man stated that he was suffering from Buerger's disease, that he was a diabetic and that he had cardiac disease and high blood pressure—"Too much for a man with a family the size of mine and only 50 years old." He went on, "That isn't all. I've been psychoanalyzed for 8 months for 5 hours a week. During that time, my insulin dosage has had to be increased, I've gained 40 pounds, my blood pressure has gone up 35 points and from 1½ packs of cigarettes I have gone up to 4½ packs a day. I am still the psychoanalyst's patient, I have an appointment with him for Monday but he is paid up to date. He says he is slowly uncovering the psychodynamics of my self-destruction behavior. I myself think that I'm digging my grave with power tools."

Then with utter gravity he asked, "Would it be unethical for you, knowing that I am another physician's patient to give me the benefit of two hours of hypnotherapy this afternoon? My analyst disapproves of hypnosis, but he certainly hasn't done me any good."

*Amer. J. Clin. Hypn. 1964, 6, 269-271.

The simple reply was made that, from my point of view, the question of professional ethics did not enter into the situation at all, that every patient, including mine, has the right to seek from any duly trained and licensed physician whatever proper help he desires, that medical ethics should properly be centered about the patient's welfare rather than a physician's desire to keep a patient.

He was then told to close his eyes, and repeat his story from beginning to end, to do this slowly, carefully, to drop out the question of ethics and in its place to specify what he wanted from the author. This he was to do slowly, thoughtfully, appraisingly, and as he did so, the mere sound of his own voice would serve to induce in him a satisfactory trance in which he could continue to talk to the author, listen to the author, answer questions, *do any thing asked of him by the author and that he would find himself under a most powerful compulsion to do exactly that which was indicated.*

The man was taken aback at these unexpected instructions, but leaned back in his chair, closed his eyes, and slowly began his recitation with pertinent additions. Shortly his voice began to trail off, indicating that he was developing a trance and he had to be told several times to speak more loudly and clearly.

No mention was made of the question of ethics but, with a wealth of detail, *he outlined the therapy which he thought to be indicated.* He was asked to repeat this several times and each time he did so more positively, emphatically and inclusively.

After 4 such repetitions the author pointed out that he, as a physician, had offered no advice or therapeutic or corrective suggestions, that every item in that regard had come from the patient himself *and that he would find himself under the powerful compulsion arising from within him to do everything that he thought was indicated.* To this was added that he could remember any selected parts of his trance state, but regardless of what he remembered or did not remember *he would be under a most powerful compulsion to do all that he himself thought to be indicated.*

He was aroused, a casual conversation initiated and he left.

A year later, in excellent physical shape, he brought in an old childhood friend of his, and stated very briefly, "I eat right, I sleep good, my weight is normal, my habits regular, my diabetes is under good control, my Buerger's disease has not progressed, my blood pressure is normal, I never went back to my analyst, my business is better than ever, I'm a new man and my whole family thanks you. Now this man is my boyhood pal, he's got emphysema, a very bad heart, look at his swollen ankles, and he smokes like a chimney. He's been under doctor's care for years." (This man was smoking one cigarette and had another out of the package ready to light.)

"Treat him the way you did me, because I told him you talked to me in a way that just takes complete hold of you."

He left the office with the new patient remaining.

Essentially the same procedure was carried out, checking against the first patient's file as this was done, and almost precisely the same words were used that were applicable.

At the close of the interview the man left, leaving his cigarettes behind him.

Six months later, a long distance call was received from the first patient stating, "Well, the news is bad but you should feel good. Joe died last night in his

sleep from a coronary attack. After he left your office, he never smoked another cigarette, his emphysema was much better, and he enjoyed life instead of worrying all the time about running out of cigarettes and about the cigarettes making his condition worse."

CASE 3

A TELEPHONE CALL was received early in the morning. A man's voice said, "I've just realized that my condition is an emergency. How soon can I come in?" He was told that a cancellation had just been received and he could be seen in one hour's time. At the specified time a 32-year old man walked in, smoking a cigarette and stated hastily, "I'm a chronic smoker. I need help. I've been in psychotherapy twice a week for two years. I want to quit smoking. I can't. Look! I've got 6 packs in my pockets right now so I can't run out of them. My analyst says I am making progress but I was only carrying 2 packs a day when I first went to him. Then slowly I increased my reserve and emergency supplies until it is up to 6 packs a day. I'm afraid to leave home without at least 6 packs in my pocket. I read about you. I want you to hypnotize me out of smoking."

He was assured that *this could not be done* but that the author would like to have him retell his story slowly, carefully, with his eyes closed, and to give it in good detail, letting his unconscious mind (he was a college graduate) take over all dominance, and that, as he related his story, he was to specify in full and comprehensive detail exactly what it was he wished in relation to cigarettes, but that during his narrative he would find himself going unaccountably into a deep and deeper trance without any interruption of his story.

The procedure and results were almost exactly comparable to the two preceding cases.

Two years later another telephone call was received from the same man asking for a half-hour appointment at noon and volunteering to pay an hour's fee. He again declared it to be an emergency.

Exactly at noon he came striding into the office and remarked, "You won't recognize me. You only saw me for an hour two years ago. I am Mr. X and I had had two years of analysis for excessive smoking with only an increase in my smoking. I can't remember what went on when I saw you but I do know that I haven't smoked a cigarette since then. It's embarrassing, too, because I can't even light one for my girl. I've tried many times but I can't."

"But I went back to that analyst and he took all the credit for my stopping smoking. I didn't tell him about you. I thought I needed to see him about what he called a character defect in me. Here I am with a college education, and the longest I've worked at a job has been 3 months. I can always get a job, but I'm 34 now, and 4 years of psychoanalysis has wound up with my last job lasting only 5 weeks. But I'm 34 now and I've got the promise of another job with a future to it. Now I want you to do something about whatever is wrong with me because I've quit the analyst. I've had better jobs than the one coming up but there is nothing to hold me to it. It will be the same old story. Now, hypnotize me and do what I should have had you do two years ago, whatever that was."

His former case record was looked up to refresh the author's memory. As precisely as possible the technique of the previous occasion was followed and he was again dismissed.

Two years later he was still at the "new job" but had been promoted to a managerial position which he has held for over a year. A chance meeting with him disclosed this fact and also that he is married, a father and that his wife voluntarily gave up smoking.

SUMMARY

THREE OF A LONG SERIES of similar cases are reported here to illustrate the use of hypnosis as a technique of deliberately shifting from the therapist to the patient the entire burden of both defining the psychotherapy desired and the responsibility for accepting it. Often this is the most difficult part of psychotherapy. In all the patients this author has handled successfully in this manner, all had a history of a steady persistent search for therapy, but a failure to take the responsibility of accepting it. Additionally, all such patients with whom the author has had a know success were of a superior intelligence level.

In traditional ritualistic and conventional psychotherapies, much, often futile, effort is made to induce the patient to assume adequately the responsibility for his own behavior and for future effort. This is done without regard for the patient's consciously thinking and firmly believing as an absolute truth the futility of any effort on his own part.

But utilizing hypnosis as a technique of deliberately and intentionally shifting to the patient his own burden of responsibility for therapeutic results and having him emphatically and repetitiously affirm and confirm in his own thought formulations and his own expressed verbalizations of his own desires, needs and intentions at the level of his own unconscious mentation, forces the therapeutic goals to become the patient's own goals, not those *merely offered* to them by the therapist he is visiting.

That this procedure always is successful is not true. There are many patients who want therapy but do not accept it until adequately motivated. There are other patients whose goal is no more than the continuous seeking of therapy but not the accepting of it. With this type of patient hypnotherapy fails as completely as do other forms of therapy.

An Hypnotic Technique for Resistant Patients: the Patient, the Technique and Its Rationale and Field Experiments*

THERE ARE MANY TYPES of difficult patients who seek psychotherapy and yet are openly hostile, antagonistic, resistant, defensive, and present every appearance of being unwilling to accept the therapy they have come to seek. This adverse attitude is part and parcel of their reason for seeking therapy; it is the manifestation of their neurotic attitude against the acceptance of therapy and their uncertainties about their loss of their defenses and hence it is a part of their symptomatology. Therefore, this attitude should be respected rather than regarded as an active and deliberate or even unconscious intention to oppose the therapist. Such resistance should be openly accepted, in fact, graciously accepted, since it is a vitally important communication of a part of their problems and often can be used as an opening into their defenses. This is something that the patient does not realize; rather, he may be distressed emotionally since he often interprets his behavior as uncontrollable, unpleasant, and uncooperative rather than as an informative exposition of certain of his important needs.

The therapist who is aware of this, particularly if well skilled in hypnotherapy, can easily and often quickly transform these overt seemingly uncooperative forms of behavior into a good rapport, a feeling of being understood, and an attitude of hopeful expectancy of successfully achieving the goals being sought.

Usually these patients have consulted more than one therapist, have encountered failures of treatment, and their difficulties have grown worse. This fact alone warrants increased concern and care in meeting their needs, particularly if it is appreciated that such a seemingly unfriendly beginning of the therapeutic relationship often actually augurs well for a more speedy therapeutic course if met comfortably and easily as a symptom and not as a defense.

Hence, the therapist aids the patient to express quickly and freely his unpleasant feelings and attitudes, encouraging the patient by open receptiveness and attentiveness, and by the therapist's willingness to comment appropriately in a manner to elicit his feelings fully in the initial session.

Perhaps this can be illustrated by the somewhat extreme example of a new patient whose opening statement as he entered the office characterized all psychiatrists as being best described by a commonly used vulgarity. The immediate reply was made, "You undoubtedly have a damn good reason for saying *that* and *even more*." The italicized words were not recognized by the patient as a direct intentional suggestion to be more communicative but they were most effective. With much profanity and obscenity, with bitterness and resentment, and with contempt and hostility he related his unfortunate, unsuccessful, repeated, and often prolonged futile efforts to secure psychotherapy. When he paused, the simple comment was made casually, "Well, you must have had a hell of a good

*Amer. J. Clin. Hypn. 1964, 1, 8-32.

reason to *seek therapy from me.*" (This was a definition of his visit unrecognized by him.)

Again the italicized words were no more than part of a seemingly wondering comment spoken in his own type of language. He did not recognize that the therapeutic situation was being defined to him, despite his response of, "Don't worry, I'm not going to develop a positive transference or [unprintable words] on you. I'm going to pay you good money to do a job on me, get it? I don't like you, I know a lot of people that don't like you. The only reason I'm here is I've read a lot of your publications and I figure you can handle a disagreeable, fault-finding, uncooperative [unprintable words] who is going to resist every damn thing you try to do for me. That's something I can't help, so either tell me to get the hell out of here or to shut up, and you get down to business, but don't try psychoanalysis. I've had all that baloney I can take. Hypnotize me, only I know you can't in spite of your writings. So, get a move on!"

The reply was made in a casual tone of voice and with a smile, "O.K., shut up, sit down, keep your damn mouth shut and listen; and get it straight, I am going to *get a move on* (using the words of the patient's own request) but *I move just as slow or as fast as I damn please.*" (My terms for the acceptance of his request for therapy were phrased in his own language though said casually and in a voice free from any unpleasant intonations and inflections. Thus the patient is told effectively vitally important matters in the italicized words without his conscious recognition of the fact.)

The patient seated himself and glared silently and belligerently at the author. He did not realize that he was thereby committing himself to a therapeutic situation. Instead, he misunderstood his behavior as uncooperative defiance. With his attention and understandings thus fixated and centered, a hypnotic technique was used that has been worked out over the years with the unintentional aid of many difficult resistive uncooperative patients and by much speculation upon how to transform their own utterances into vitally important suggestions effectively guiding their behavior, although without such recognition by them at the time.

THE TECHNIQUE AND ITS RATIONALE

The technique, to be given in detail shortly, which is used sometimes almost verbatim, can be shortened or made longer by repetitions and elaborations all in accord with the patient's capacities to understand and to respond. It is advantageous to modify it to include the patient's own style of speech, whether abrupt, impolite or even outrageously profane. However, the author, in his use of it, usually discontinues very rapidly the discourtesies of the patient's own type of language, but he is likely to continue any ungrammatical constructions that may be characteristic of the patient's speech. Thus the patient's violence (linguistically expressed) is unnoticeably discarded and the patient and the therapist arrive at a safe, pleasant linguistic level familiar in form to the patient. The patient does not know how this happened nor does he often sense that it is happening because of its indirectness; nor is there any reason for the patient to be led to understand the techniques and levels of communication, any more than does the surgical patient need to have a full comprehension of the surgical techniques to be employed.

When sufficient material has been obtained from the aggressive, hostile, antagonistic, defensive, uncooperative patient to appraise his unfortunate behavior and attitude and to judge his type of personality, he is interrupted by an introductory paragraph of mixed positive and negative seemingly appropriate and relevant remarks addressed to him in the form of language he can best understand at that moment. However, concealed and disguised in these remarks are various direct, indirect and permissive suggestions intended to channel his reactions into receptive and responsive behavior.

For the patient cited above as an example, he was told, "I do not know whether or not you are going into a trance as you have asked." (One needs to scrutinize well this sentence to recognize all the positives and negatives, something not possible when listening to it.) With this introductory remark to this specific patient, utilization was then made of the following technique which is actually no more than a casual, not necessarily grammatical, explanation loaded with direct and indirect permissive suggestions and instructions but not easily recognizable as such. Hence, these will, in large part, be italicized to enable more easy recognition. Parenthetical inserts or explanatory paragraphs are for clarification for the reader only, and were, of course, not part of the verbalized technique.

"*You have come for therapy, you have requested hypnosis, and the history you have given of your problem leads me to believe strongly that hypnosis will help you. However, you state most convincingly that you are a resistant hypnotic subject, that others have failed despite prolonged efforts to induce a trance, that various techniques have been of no avail and that reputable men have discredited hypnosis for you and as a therapeutic aid in itself. You have frankly expressed your conviction that I cannot induce a trance in you, and with equal frankness you have stated that you are convinced that you will resist all attempts at hypnosis and that this resistance will be despite your earnest desire and effort to cooperate.*" (To resist hypnosis, one recognizes its existence since there can be no resistance to the non-existent and its existence implies its possibility. Thus the question becomes not one of the reality or value of hypnosis, but simply a question of his resistance to it. Thereby the ground is laid for the use of hypnosis but with his attention directed to his understanding of resistance to it. Hence, hypnotic induction is rendered a possibility by any induction technique not recognizable to him.)

"*Since you have come for therapy and you state that you are a fault-finding un-cooperative patient, let me explain some things before we begin. So that I can have your attention, just sit with your feet flat on the floor with your hands on your thighs, just don't let your hands touch each other in any way.*" (This is the first intimation that more is being communicated than the eat heats.)

"Now so that *you will sit still* while I talk, just look at that paperweight, just an ordinary handy thing. By looking at it you will hold your eyes still and that will hold your head still and that will hold your ears still and *it's your ears I'm talking to.*" (This is the first intimation of dissociation.) "no, don't look at me, just at the paperweight because I want your ears still and you move them when you turn to look at me." (Most patients tend at first to shift their glance, so eye-fixation is effected by a request not to move the ears, and rarely does it become necessary to repeat this simple request more than three times.) "Now when you came into this room you brought into it *both of your minds*, that is, the front of

your mind and the back of your mind." ('Conscious mind' and 'unconscious mind' can be used, depending upon the educational level, and thus a second intimation is given of dissociation.) "Now, I really don't care if you listen to me with your conscious mind, because *it doesn't understand your problem* anyway or you wouldn't be here, so *I just want to talk to your unconscious mind* because it's here and close enough to hear me so you can let your conscious mind listen to the street noises or the planes overhead or the typing in the next room. Or you can think about any thoughts that come into your conscious mind, systematic thoughts, random thoughts because *all I want to do is to talk to your unconscious mind and it will listen to me* because it is within hearing distance even if *your conscious mind does get bored*" (boredom leads to disinterest, distraction, even sleep). "If your eyes get tired it will be all right to close them but be sure to keep a good alert," (a disarming word so far as any assumed threat of hypnosis is concerned) "*a really good mental or visual image alertly in your mind*" (an unrecognizable instruction to develop possible ideosensory visual phenomena while the word 'alertly' reassures against hypnosis). "*Just be comfortable while I am talking to your unconscious mind since I don't care what your conscious mind does.*" (This is an unrecognizable dismissal of his conscious attention following immediately upon a suggestion of comfort and communication with only his unconscious mind.)

"Now before *therapy can be done*, I want to be sure that you realize that *your problems just aren't really understood by you* but that *you can learn to understand them with your unconscious mind.*" (This is an indirect assertion that therapy can be achieved and how it can be done with more emphasis upon dissociation.)

"Something everybody knows is that people can communicate verbally ('talk by words' if warranted by low educational or intelligence level) or by sign language. The commonest sign language, of course, is when you *nod your head yes or no*. Anybody can do that. One can signal 'come' with the forefinger, or wave 'bye-bye' with the hand. The finger signal in a way means 'yes, come here,' and waving the hand means really 'no, don't stay.' In other words one can use the head, the finger or the hand to mean either yes or no. We all do it. *So can you.* Sometimes when we listen to a person we may be *nodding or shaking the head not knowing it* in either agreement or disagreement. *It would be just as easy to do it with the finger or the hand.* Now I would like to ask your unconscious mind a question that can be answered with a simple yes or no. It's a question that *only your unconscious mind can answer*. Neither your conscious mind nor my conscious mind, nor, for that matter even my unconscious mind knows the answer. *Only your unconscious mind knows which answer can be communicated*, and it will have to think either a yes or a no answer. *It could be by a nod or a shake of the head, a lifting of the index finger*, let us say, the right index finger for the yes answer, the left index for a no since that is usually the case for the right-handed person and vice versa for the left-handed person. *Or the right hand could lift or the left hand could lift.* But *only your unconscious mind knows* what the answer will be when I ask for that yes or no answer. And not even your unconscious mind will know, when the question is asked, whether *it will answer with a head movement, or a finger movement*, and *your unconscious mind will have to think through that question and to decide*,

after it has formulated its own answer, just how it will answer." (All of this explanation is essentially a series of suggestions so worded that responsive ideomotor behavior is made contingent upon an inevitable occurrence, namely, that the subject "will have to think" and "to decide" without there being an actual request for ideomotor responses. The implication only is there, and implications are difficult to resist.)

"Hence, *in this difficult situation in which we find ourselves* (this establishes a 'relatedness' to the patient) we will both have to sit back and *wait and wait* (participatory behavior) *for your unconscious mind to think the question through, to formulate its answer, then to decide*, whether by head, finger or hand, *to let the answer happen.*" (This is a second statement of suggestions and instructions in the guise of an explanation. Seemingly, the subject has been asked to do nothing, but actually he is directly told to be passive and to permit an ideomotor response to occur at an unconscious level of awareness signifying an answer that he had been told carefully to "let happen" as another and definite contingent result of mental processes. In all this procedure, there have been implied or indirect suggestions given that the conscious mind will be unaware of unconscious mental activity, in essence, that he will develop an anamnestic trance state.)

"In other words, I will ask a question to which *only your unconscious mind can give the answer*, and concerning which your conscious mind can only guess if it does at all; maybe correctly, maybe wrongly, or maybe have only some kind of an opinion, but, it so, only an opinion, *not an answer.*" (This a lessening of importance of his conscious thinking not recognizable to him, and a further implication of a trance state.)

"Before I ask that question, I would like to suggest two possibilities. (1) Your conscious mind might want to know the answer. (2) You unconscious mind *might not* want you to know the answer. My feeling, and I think you will agree, is that you came here for therapy for reasons *out of the reach of your conscious mind*. Therefore, I think that we should approach this matter of the question I am going to put to your unconscious mind for *its own answer* in such a way that *your own deep unconscious wishes to withhold the answer with your conscious mind are adequately protected and respected.* This, to me, is a fair and equitable way in dealing with one's self and one's problems." (This is what he knows he wants from others, but has not quite recognized that he wants fair and equitable treatment from himself.)

"Now, to meet your needs, I am going to ask that yes or no question and *be prepared to be pleased to let your unconscious mind answer*, (this is an unrecognized authoritative suggestion with a foregone conclusion permissively stated) and in doing so, either *to share the answer with your conscious mind or to withhold it, whatever your unconscious mind thinks to be the better course.* The essential thing, of course, is *the answer, not the sharing nor the withholding.* This is because any withholding will actually be only for the immediate present, since *the therapeutic gains you will make* (also an unrecognized authoritative statement given in the guise of an explanation) will eventually disclose the answer to you *at the time your unconscious mind regards as most suitable and helpful to you.* Thus, *you can look forward to knowing the answer sooner or later, and your conscious desires, as well as your unconscious desires, are the seeking of*

therapy and the meeting of your needs in the right way at the right time." (This is a definitive suggestion given as an explanation and a most emphatic positive suggestion.)

"Now how shall this question be answered? By speech? Hardly! You would have to verbalize and also to hear. Thus, there could then be no *fair dealing* (socially and personally potent demanding words) with your unconscious mind if it wished, for your welfare, to withhold the answer from your conscious mind. How then? Quite simply, by a muscular movement *which you may or may not notice*, one that can be done at either a noticeable voluntary level or *one that is done involuntarily and without being noticed*, just as you can nod your head or shake it without noticing it when you agree or disagree with a speaker, or frown when you think you are just trying to call something to mind.

"What shall that muscle movement be? I think it would be better to mention several possibilities (simply 'think' or 'mention,' apparently not demanding, ordering or suggesting), but before doing so, let me describe the difference between a conscious mind muscle response and that of the unconscious mind." (Muscle response is mentioned while his attention is being fixated; a maneuver to maintain that attention for the future introduction of related but delaying material. The reader will note the previous use of this psychological gambit of mentioning a topic and then entering into a preliminary explanation.) "The conscious mind response cannot be withheld from you. You know it at once. You accept it and you believe it, perhaps reluctantly. There is no delay to it. It springs to your mind at once and you promptly make the response.

"An unconscious mind response is different, because *you do not know what it is to be*. *You have to wait for it to happen* and consciously you cannot know whether it will be 'yes' or 'no'." (How can a muscle movement be a 'yes' or a 'no'? The patient has to listen intently for some reasonable explanation.) "*It does not need to be in accord with the conscious answer* that can be present simultaneously in accord with your conscious mind's thinking. *You will have to wait*, and perhaps wait and wait, *to let it happen. And it will happen in its own time and at its own speed.*" (This is an authoritative command but sounds like an explanation, and it provides time for behavior other than conscious, in itself a compelling force. Additionally one never tells the patient that an unconscious reply is almost always characterized by a strong element of perseveration. Apparently an altered time sense in hypnotic subjects, possibly deriving from their altered reality relationships, prevents even experienced subjects from appreciating this point, and it constitutes an excellent criterion of the character of the response. This perseveration of ideomotor activity, however, is much briefer in duration if the unconscious mind wishes the conscious mind to know; the little-lag and the dissociated character are greatly reduced, although the unconscious answer may be considerably delayed as the unconscious mind goes through the process of formulating its reply and the decision to share or not to share. If the patient closes his eyes spontaneously, one can be almost certain that the reply given will be spontaneously withheld from the patient's conscious awareness. When the answer is "shared," especially if the conscious opinion is opposite in character, the patient shows amazement, and sometimes unwillingly admits to the self an awareness of strong feeling that the unconscious answer is unquestionably correct, thereby intensifying his hypnotic response. A repetition for comparison by asking

another simple question can be elicited by the operator by careful wording of a question such as, "But you *can* withhold an answer, can you not?", doing this so casually that the patient does not realize that the second question has been asked. Thus there can be secured a second ideomotor response that is withheld from or not noticed by the conscious awareness. Insuring that the patient learns both to share unconscious activity and to withhold it from conscious awareness greatly speeds psychotherapy. Thus, I have had a resistant patient, in reply to my question, consciously and promptly shake his head in a negative, briefly and emphatically, and then sit wonderingly at my apparent tardiness of response to his reply, not knowing that I was waiting silently to see if there would occur a slow head turning in a perseverative way from left to right, or an up and down nodding. Experimenting with such patients has disclosed such perseverative movements, particularly of the head, that may last as long as 5 minutes without the patient becoming aware of what was occurring. Once the patient is in a trance, the ideomotor response can then be as rapid as movement in the ordinary state of awareness, although in general there is a cataleptic character that is most informative of the patient's hypnotic state. This is another criterion for the operator's guidance, unrecognized by the subject.)

"Now what shall the movement be? Most people nod or shake their head for a 'yes' or a 'no,' and the question I am going to ask is that kind of a question, one requiring either a simple 'yes' or a simple 'no.' Other people like to signal by an upward movement of the index fingers, one meaning 'yes,' the other 'no.' I usually, as do most people (the phrase 'I usually' and 'most people' indicate that *naturally it is to be expected of both of us that behavior common to most people will occur*) like to use the right index finger for 'yes' and the left for 'no,' but it is often the other way around for left-handed people." (Let there be no hint of arbitrary demands, since the patient is resistant and this suggestion is one of freedom of response even though an illusory freedom.) "Then again some people have expressive hands, and can easily, voluntarily or involuntarily, move their right hand up to signify 'yes' or the left to signify 'no.'" ('Expressive hands' is only an implied compliment, but most appealing to any narcissism. Indeed, it is not at all uncommon for a person to beckon with a finger or to admonish with a finger or a hand.)

"I do not know if your unconscious mind wants your conscious mind to look at some object, or to pay attention to your head or fingers or hands. Perhaps you might like to watch your hands, and if your eyes blur as you watch them fixedly while you wait to see which one will move when I ask my simple question, such blurring is comprehensible. It only means that your hands are close to you and that you are looking at them intently." (Even if the patient's eyes are closed this paragraph can be used unconcernedly. In its essence, it is highly suggestive of a number of things, but unobtrusively so. Actually, the sole purpose of these purported and repetitious explanations is merely to offer or to repeat various suggestions and instructions without seemingly doing so. Also a variety of possibilities is offered, essentially as an indirect double-bind, which renders a refusal to make a response most difficult. All of the items of behavior are being suggested in such fashion that seemingly all the patient does is to manifest *his choice*, but he has actually *not been asked* to make a choice of the possibilities merely mentioned to him. He is not aware of what else is being said or implied. The author's

personal preference is an ideomotor head movement, which can easily be achieved without conscious awareness, but regardless of the type of movement employed by the patient, the author immediately shifts to a second type of ideomotor response and perhaps to a third to intensify the patient's total responsiveness. The hand movement offers certain distinct advantages in that it lends itself readily to the elicitation of other phenomena, as will be described later.)

"Now (at long last, and the patient's eagerness is at a high point) we come to the question! I do not need to know what is to be your choice of the movements to be made. You have your head on your neck and your fingers are on your hands and you can let your hands rest comfortably on your thighs or on the arms of the chair. *The important thing is to be comfortable while awaiting your unconscious answer.*" (In some way comfort and the unconscious answer become unrecognizably contingent upon each other, and the patient naturally wants comfort. Equally naturally he has some degree of curiosity about his "unconscious answer." Also, another delaying preliminary explanation is being given.) "Now you are in a position for any one or all of the possible movements (an unrecognized authoritative suggestion). As for the question I am to ask, that, too, is not really important. What is important is *what your unconscious mind thinks and what it does think neither you nor I consciously know. But your unconscious does know since it does do its own thinking but not always in accord with your conscious thoughts.*

"Since you have asked me to induce a trance, I could ask a question related to your request, but I would rather ask a simpler one (a possible threat of hypnosis removed). Hence, *let us* (we are working together) ask a question so general that it can be answered by any one of the various muscle ways described. Now here is the question to which I want you to listen carefully, and then to wait patiently to see or perhaps not to see, what your unconscious answer is." (After so much apparently plausible delay, the patient's attention is now most fixed, he is, so to speak, "all ears" in his desire to know the question and such desire has to have an unrecognized basis of acceptance of the idea that his unconscious mind will answer). "My question is, (said slowly, intently, gravely) Does your unconscious mind *think* it will raise your hand or your finger or move your head?" (Three possibilities, hence the conscious mind cannot know.) "Just wait patiently, wonderingly, and let the answer happen."

What the patient does not know and has no way of realizing, is that he is being communicated with on two levels, that he is in a double or triple bind. He cannot deny that his unconscious mind can think. He is inescapably bound by that word "think." *Any ideomotor or non-volitional movement, whether positive or negative, is a direct communication from his unconscious mind* (but his thinking does not extend to that realization). If slowly his head shakes "no," my cataleptic response is also hypnotic; it is one of the phenomena of hypnosis, I can then ask him to be more comfortable, and, if his eyes are open I add, "perhaps by closing your eyes, taking a deep breath and feeling pleased that your unconscious mind is free to communicate to me as it wishes."

Thus, without his awareness and before he has time to analyze the fact, he is communicating at the level of the unconscious mind, thereby literally going into a trance despite his previous conscious conviction that he would inevitably defeat his own wishes to be hypnotized. In other words, his resistances have

been by-passed by making hypnotic responses contingent upon his thought processes in response to seemingly nonhypnotic discussion of various items and his false belief that he cannot be hypnotized is nullified by a pleasing unconscious awareness that he can cooperate. If he becomes aware that he is responding with ideomotor activity, he is bound to recognize that his unconscious mind has charge of the situation. This places him in another double bind, that of being in the position of letting his unconscious mind "share" with his conscious mind whatever it wishes, which, as a further double bind will commit him quite unwittingly also to let his unconscious mind *withhold* from his conscious mind with a consequent hypnotic amnesia at the conscious level. Thus, with no seeming effort at trance induction as the patient understands it, a trance state has been induced.

Fortunately for both the operator and the patient, the elicitation of a single hypnotic phenomenon is often an excellent technique of trance induction, and should, for the patient's benefit, be used more often. The realization of this was first reached in the summer of 1923 while attempting to experiment with automatic writing. To the author's astonishment, the subject, his sister Bertha, who had never before been hypnotized nor seen hypnosis induced, developed a profound somnambulistic trance while suggestions were being made only to the effect that slowly, gradually, her right hand, holding a pencil on a pad of paper, would begin to quiver, to move, to make scrawling marks until her hand wrote letters, then words forming a sentence while she stared fixedly at the door just to enable her body to sit still. The sentence, "Grandma's dog likes eating those bones," was written, and the author inquired what she meant and received reply, while she pointed cataleptically toward the door, "See! He is eating that dishful of bones and he likes them." Only then did the author realize that a trance had been unintentionally induced and that she was hallucinating visually what she had written since Grandma's dog was miles away. Many times thereafter automatic writing was used as an indirect technique of trance induction, but was discarded because writing is a systematic ordering of a special skill and hence is too time-consuming. A ouija board was next utilized, but this, while somewhat effective in inducing a trance indirectly, was discarded because of its connotations of the supernatural. Resort was then more reasonably made to the simple movements of the type made automatically, promptly, requiring no particular skill. At first a modification of automatic writing was employed, a modification spontaneously and independently developed by a huddle of different subjects, namely, the use of a vertical line to signify "yes," a horizontal line to signify "no," and an oblique line to signify "I don't know." This has been described elsewhere by Erickson and Kubie (*Psychoanalytic Quarterly* Oct. 1939, Vol 8, No. 4 pp 471-509). It has often proved a rapid indirect technique to trance induction.

Once an ideomotor response is made, without further delay it can be utilized immediately. For example, should the patient shake his head "no," his "yes" hand is gently lifted and spontaneous catalepsy becomes manifest. Or if the "yes" finger makes an ideomotor response, the hand opposite is lifted to effect catalepsy; or the patient may be told that his head can agree with his finger. If his eyes are open, (they often close spontaneously as the ideomotor activity begins) the simple suggestion can then be made that he can increase his physical comfort by

relaxing comfortably, closing his eyes, resting pleasurabley, taking a deep breath and *realizing with much satisfaction that his unconscious mind can communicate directly and adequately and is free to make whatever communication it wishes*, whether by sign language, verbally or in both manners. He is urged to realize that there is no rush or hurry, that *his goals are to be accomplished satisfactorily rather than hurriedly*, and that *he can continue the unconscious mind communication indefinitely*. Thus, the words trance or hypnosis are avoided and yet a multitude of hypnotic and post-hypnotic suggestions can be given in the form of a manifestation of interest in the patient's comfort, in explanations and in reassurances, all of which are worded to extend indefinitely into the future with the implied time limit of *goals satisfactorily reached*. (These italicized words are, in the situation, an actual double bind.) In this way a most extensive foundation is laid easily for good rapport, further trances and rapid therapeutic progress, and usually this can be done within the first hour. In extraordinary cases the author has been forced by the patient to take as much as 15 hours, all spent by the patient in denouncing the author and the expected failure to result from the effort at treatment, with a good trance and therapeutic progress rapidly ensuing thereafter.

The use of this technique on the patient cited as an example above whose intense unhappy belligerency suggested its suitability resulted in the development of a deep anamnestic trance employed to give post-hypnotic suggestions governing future therapeutic hypnoanalytic sessions.

He was aroused from the trance by the simple expedient of remarking casually, as if there had been no intervening period of time, "Well, that is (note the present tense of the italicized word) some cussing that you have just been giving me." Thus the patient was subtly reoriented to the time at which he had been verbally assaulting me and accordingly he aroused "spontaneously" from his trance state, appearing much bewildered, checked the clock against his watch and the author's and then remarked in astonishment "I've been cussing you out for over 15 minutes, but a lot more than an hour has gone by! What happened to the rest of the time?" He was given the answer, "So you cussed me out about 15-20 minutes (a deliberate though minor expansion of his time statement), and *then you lost the rest of the time!*" (Thus the patient is indirectly told he can *lose*). "Well, that is *my* cotton-picking business, and now that you know you can lose time, you ought to know you can lose some things you don't want to keep just as easily and unexpectedly. So, *get going*, come back the same time next Friday, and *pay the girl in the next room*." (The patient's own words were used but turned back upon him. Although these words were used originally in terms of starting therapy they were now in relationship to the therapist instructing the patient about his part in the therapy. Also, since he had said that he was paying "good money" for therapy, by requesting immediate payment, he was unwittingly being committed to the idea that he was receiving that which he had so emphatically and impolitely demanded.)

Upon his return on Friday, he took his seat and asked in a puzzled but unduly tense voice, "Do I have to like you?" The implications of the question are obvious, the tension in his voice betoken alarm, and hence he had to be reassured with no possibility of his detecting any effort to reassure him. Accordingly, the tone of the first meeting was re-established safely by casually, comfortably

stating, "Hell no, you damn fool, *we got work to do.*" The sigh of relief and the physical relaxation that followed this seemingly impolite and unprofessional reply attested to his need, and it easily shifted his attention to the purpose expressed in the italicized words and relieved him of an inner anxiety which was actually a probably threat to continuance of therapy.

As he relaxed the casual statement was made, "Just close your eyes, take a deep breath, and *now let's get at that work we got to do.*" By the time the author had finished this statement, the patient was in a profound somnambulistic trance, and thereafter, merely sitting down in that chair induced a trance. When the therapist did not wish him to develop a trance, he was simply asked to sit in another chair.

At the fourth session (a trance) he asked, "Is it all right to like you?" He was told, "Next time you come, sit in the straight-back chair and the question and answer will come to you (note sharing in the description of the technique)."

At the next session he "spontaneously" sat in the straight-back chair, looked startled, and declared, "Hell yes, I can do any damn thing I want to." The reply was made, "Slow learner, huh?" To this he answered, "I'm doing O.K." and arose, sat in the regular chair and went into a trance. (He didn't want any "baloney" about a "transference" and its "resolution" but he could do "*any damn thing he wanted to do.*" Thus he recognized a certain emotional reaction, admitted it to himself and then disposed of it by "going to work" and wasting no time in some laborious attempt at "analyzing his transference neurosis." Instead he was solely interested in what he had previously said in the words of "get going."

Therapy was less than 20 hours, each interview was highly productive with ever-increasing "sharing." Ten years later he is still well-adjusted and a warm friend of the author though our meetings are infrequent.

The technique described above has been used many times over a long period of years with minor variations. Various patients have contributed to its development by presenting opportunities for the author to introduce new suggestions and additional indirect communications and various types of double binds. As given above, it is in essence complete and has been extensively used in this form with only the modifications required by the patient's own intelligence and attitudes. To write this paper, old records were consulted, and the technique itself was written out first as a separate item. Then, for this paper, it was rewritten with parenthetical inserts and explanatory paragraphs for an exposition of the technique. In the field experiments that follow below, not originally even considered, the copy of the technique without inserts was employed to permit a smoother and easier use with those patients.

FIRST FIELD EXPERIMENT

THIS PAPER had been typed in final form up to this point and it had been carefully reviewed that same evening. The next morning a most fortunate coincidence occurred.

A new patient, 52 years old, a successful upper social class business man entered the office. He was shame-faced, embarrassed and in apparently severe emotional distress. He pointedly looked at the state license to practice medicine in Arizona posted on the wall in accord with Arizona law, read the certificate from the American Board of Psychiatry and Neurology qualifying the author as a diplomate of

that Board, picked up the Directory of Medical Specialists from the dictionary stand, read the author's qualifications there, picked up the Psychological Directory and read the author's qualifications there, went to the book case and selected the books, *The Practical Applications of Medical and Dental Hypnosis* and *Time Distortion in Hypnosis*, pointed to the author's name on the dust jackets and remarked caustically, "So you fool around with that stuff!" The author agreed casually but (to add further fuel to the patient's fire) added, "And just last night I finished writing a paper on hypnosis, and I am also the Editor of The American Journal of Clinical Hypnosis." The reply was, "Yes, I've heard plenty about you being a crack-pot but I'm in trouble, (noting that the author was writing down each of his statements, the patient spontaneously slowed his speech to accommodate the author's writing speed, but otherwise continued uninterruptedly with his complaints) and I need help.

"And it's getting worse. It began about 8 years ago. I'd be driving to work and I would go into a panic and would have to park the car at the curb. Maybe a half-hour later I could drive the rest of the way to the office. Not constantly, but slowly it increased in frequency until one day it changed. I couldn't park by the curb. I had to drive home. Sometimes it happened on my way home from the office and I'd have to drive back there. Then maybe after an hour, sometimes only a half-hour later, I could go to the office or home with no difficulty. My wife tried to drive me there to save me from these panic states. That just made things worse. I'd be sure to get a panic and yell at her to speed up. I tried taxicabs. That didn't work. The taximen thought I was off my rocker because I would suddenly yell at them to turn around and try to make them break the speed laws getting back home or getting back to the office. I tried a bus once and I thought I'd go crazy. The bus driver wouldn't let me off until he reached the next bus stop. I nearly killed myself running back home. It didn't happen every day at first, but it kept getting more frequent until three years ago it was every day I was late to the office and late back home. I had to take a lunch with me. I would get a panic going to or coming back from lunch.

"Three years ago I went into intensive therapy with Dr. X. He was trained in psychoanalysis at the Y Clinic for three years and had two years of controlled psychoanalysis himself. I saw him 4 or 5 times a week, an hour each time, for 2½ years, but I always had to allow about two hours to get there on time and then two more to get home. I didn't always need the time. I sometimes arrived way ahead of time, and sometimes I could leave on time. But I just continued to get worse. Then about 6 months ago, the psychoanalyst put me on heavy dosages of tranquilizers because I had made no improvement; but he kept on analyzing me. The analysis didn't do any good. Some of the drugs would work for a week or even two, but then they would wear out. Most of them did nothing for me. Just name a tranquilizer; I've taken it. Pep pills! Sedatives! Extra analytic hours too. Then about a couple of months ago I tried whiskey. I never had done any drinking to speak of, but what a relief that whiskey was. I could take a drink in the morning, put in a day's work at the office, take a drink and go home feeling fine. With the tranquilizers that worked, I hadn't been able to do my office work, and even those that didn't work interfered with my office work terribly. I had had to take a simpler job. For one month I used two drinks of whiskey a day, one in the morning, one at quitting time, and everything was O.K. Then about a month ago I

had to double the morning dosage, then take some at noon, then a double dose to get home. Then I started on triple doses with extra single ones thrown in between times. My home is 20 minutes from here. It took three drinks to get me here, stiff ones. I came early so I would have to wait a couple of hours and sober up, and I sober up fast.

"Just after I began my psychoanalysis I heard and read about hypnosis and heard of you. The psychoanalyst told me frankly what a crack-pot you are and that hypnosis is dangerous and useless, but even if you are a crack-pot I know that at least you have proper medical and psychiatric credentials. And no matter how dangerous and useless and stupid hypnosis is, it can't be as bad as alcohol. The whiskey I have to take each day now is turning me into an alcoholic.

"Well, you can't do any worse with hypnosis than what the alcohol is doing. I'm going to try to cooperate with you but after all I have heard about hypnosis from my psychoanalyst, and all the published stuff denouncing it he gave me, I know nobody in his right mind is going to let himself be hypnotized. But at least you can try."

This account was given while the newly finished paper on hypnotic techniques for patients uncooperative for various reasons was lying on the desk in front of the author. This suggested an immediate experiment. It was simply that the patient allow the author to read aloud his newly written paper, not disclosing the intention to use it as a hypnotic induction technique. The man disgustedly agreed to the request but refused to fixate his gaze on any object. He kept glancing about the room, and would not place his hands on his thighs but did place them on the arms of the chair.

Slowly, carefully, the technique was read almost verbatim, sometimes rereading parts of it as judged best by his facial expression.

Finally the patient began to look first at one hand and then the other. At last, his gaze became fixated on the right hand. The left index or "no" finger raised slightly, then the left middle finger. Then the right index finger with jerky, cogwheel movements began lifting in a perseverative fashion. His left index finger lowered but the middle finger remained cataleptic. His head then began a perseverative affirmative nodding that lasted until he was interrupted by the induction of catalepsy in both hands. His eyes had closed spontaneously when the left index finger was lowered.

He was allowed to continue in the trance for an additional 30 minutes while the author left the room briefly, came back, checked on the continued maintenance of his cataleptic position and then worked on this manuscript additionally.

Finally the patient was aroused from his apparently deep trænce by reiteration of the remark about reading the manuscript. He aroused, slowly shifted his position and again remarked that it (hypnosis) wasn't any more harmful than alcohol. Suddenly he noticed the clock with a startled reaction and immediately checked it with his own watch and then the author's. His startled comment was, "I came in here half an hour ago. The clock and our watches say I've been here over two hours—nearly 2½. I've got to leave.

He rushed out of the door, came rushing back and asked how soon he could have another appointment as he shook the author's hand. He was given an appointment for three days later and told, "Be sure to bring a full bottle of whiskey." (He could not recognize the implications of this but he replied that he would, that the

one in his hip pocket was nearly empty although it had been full that morning when he left the house.) He then departed from the waiting room, came back and again shook hands with the author, stating simply that he had forgotten to say good-bye.

Three days later he entered the office smilingly, made a few casual remarks about current events, sat down comfortably in the chair and offered a compliment on a paperweight. He was asked what had happened during the last three days. His eloquent reply was, "Well, I've been wondering about that problem I came to you about. I was pretty hot under the collar and I had plenty to say and I said it and you wrote it down word by word. I kept trying to figure out what it was costing me per word to let you take your time just writing it down. It irritated me quite strongly, and when I noticed I had been here 2½ hours just to let you write down verbatim what I had to say, I made up my mind that I would pay you for one hour only and let you argue about the rest. Then when you told me to bring a full bottle of whiskey the next time I came, I felt just as I did about those useless tranquilizers and I had half a mind not to come back. But after I got outside, I realized I was feeling unusually free from tension even though I was late for a business appointment, so I came back to say good-bye." (The reader will note that this is not the exact chronological sequence recorded above.) "Then I forgot to take a drink in order to drive to my appointment, maybe because I was irritated about your mention of a full bottle of whiskey."

"Then the next day before I knew it, I was at the office on time, felt fine, put in a good day's work, went out to lunch and drove home. Same thing the next day. Then this morning I remembered I had an appointment with you today. I was still angry about that 'full bottle' you mentioned, but I got one out to put in my pocket. I took a small drink out of another bottle, but forgot to put the full bottle in my pocket. I suppose you will interpret that as resistance or defiance of authority. I say I intended to and simply forgot. I was on time at the office, put in a good day's work, but at noontime an old-time friend dropped in unexpectedly and I had a long lunch with him along with a bottle of beer. Then I went back to work and just managed to remember my appointment in time to get here. So it's beginning to look as if you might be able to help me if you get around to starting instead of just writing down what I say. That's what took so long last time. I didn't need that drink this morning, but I couldn't come to you under false pretenses so I took one. A cocktail at dinner is O.K. but a morning drink is just no good. Somehow I don't feel bad about your taking your time to write down everything I say."

There was some casual discussion of current events and the author offered the unexpected comment to the patient, "Well, let's see. You were once an editorial writer on a large metropolitan newspaper, and editorials are supposed to mold the opinions of the masses. Tell me, is the opinion molded in the conscious mind of the person or the unconscious mind of the person; and what is your definition of the 'conscious mind' and the 'unconscious mind'?" He replied, "You don't go through 2½ years of psychoanalysis with wholehearted cooperation and then get brainwashed for another half-year with tranquilizers plus analysis without learning a lot, and losing a lot. All I can give you is an ordinary lay definition, namely, your conscious mind is the front of your mind and your unconscious mind is the back of your mind. But you probably know more about that than I do or Dr. X." He was

asked, "And is it possible that ever the twain shall meet?" His answer was, "That's an odd question but I think I get what you mean. I think that the unconscious mind can tell the conscious mind things but I don't think the conscious mind can either tell the unconscious mind anything or ever know what is in the unconscious. I spend plenty of time trying to excavate my unconscious mind with Dr. X and getting nowhere, in fact getting worse." Another question was put to him, "Shall I discuss the conscious mind and the unconscious mind with you some time?" His answer was, "Well, if you keep on writing down everything I say and everything you say, and I have all the luck with my problem that I had when you spent the whole time just writing down my complaints the way you did last time—by the way, I had a wonderful afternoon playing golf yesterday with a client, first good game in years and no drinking either—well, go right ahead and discuss the conscious mind, the unconscious mind, politics, hypnosis, anything you wish."

He was asked why he had made that reply. His answer was, "Well, this is a bit embarrassing. I'm 52 years old and I am just bubbling over inside like a little boy, and the feeling is one I would call faith and expectancy, just like a little kid who is dead certain he is going to have his most hopeful dreams about going to the circus fulfilled. Sounds silly doesn't it, but I actually feel like a hopeful, happy, expectant little boy."

The reply was made by asking, "Do you remember the position you sat in in that chair?" Immediately he uncrossed his legs, dropped his hands on his lap, closed his eyes, slowly lowered his head with a perseverative nodding of his head and was in a deep trance in a few moments time.

The rest of the hour was spent in an "explanation of the importance of reordering the behavior patterns for tomorrow, the next day, the next week, the next year, in brief, of the future, in order to meet the satisfactory goals in life that are desired." This was all in vague generalities, seemingly explanations but actually cautious post-hypnotic suggestions, intended to be interpreted by him to fit his needs.

He was aroused from the trance by remarking casually, "Yes, that is the way you sat in the chair last time," thereby effecting a reorientation to the time just previous to this second trance. As he aroused and opened his eyes the author looked pointedly at the clock. The patient was again startled to find that time had passed so rapidly, asked for another appointment in three days but agreed to wait five days. On the way out of the reception room he paused to look at some wood carvings and commented that he was intending without delay to do some woodwork long-postponed.

Five days later the man came in smilingly, sat down comfortably in his chair and presented a conversational appearance. He was asked what had happened over the weekend and the other three days. His reply, given slowly and patiently as it was recorded by the author, was most informative.

"I've seen you twice. You haven't done a darn thing for me or my problem and yet something is going on. I had trouble with my problem three times. I was going to the City A to dine with friends, my wife was in the front seat but I was driving. I felt the old panic coming on but I didn't let my wife know it. I haven't driven that road for years, and the last time I did, I got a panic at the same place that this new one seemed about to develop. That time I stopped the car, pretended to examine the tires and then I asked my wife to drive. This time nothing

could stop me from continuing to drive and the panic went away, but just when, I don't remember. We all had a nice time and I drove back without remembering the near panic I had on the way out. Then this noon I went to a hotel where I haven't eaten for years because of panics and just as I was leaving, an old friend came up to greet me and to tell me a longwinded boring story and I got mad at him—I wanted to get back at the office. I was just mad, not panicky. Then when I left the office to come here, a client nabbed me at the door and told me a joke and I got mad because he was delaying my trip to your office. When I did get away, I realized that I had had only one slight panic that I handled all by myself, and what you might call 'two mads' because I was delayed by someone interfering with my going where I should go. Now you will have to tell me what's going on here. Oh yes, my wife and I had two drinks one night before dinner. She said a couple of mixed drinks would taste good and they did.

"But what is going on? You sit and write down what you and I say. You don't hypnotize me, you aren't doing any psychoanalysis. You talk to me but you don't say anything in particular. I suppose when you get around to it you will hypnotize me, but what for I don't know. That problem I came in with, psychoanalyzed without results for 2½ years and brainwashed with tranquilizers and psychoanalysis for another half-year, and now in two hours without you doing anything, I'm pretty sure I'm over my problem." A casual reply was made that therapy usually takes place within the patient, that the therapist is primarily a catalyst. To this he answered, "Well, 'catalyst' when you get ready. If I can waste 3 years on psychoanalysis and tranquilizers and just get worse and I get better (note first person pronoun) in two hours watching you write, you can have all of my time you want. It's wonderful to go to the office and home and to lunch again and it was good to meet that old friend at the hotel, and that story our client told me wasn't half bad. When is my next appointment?"

He was instructed to come in a week's time and to let his unconscious mind work on his problem "as needed."

A week later the man entered the office and inquired with some bewilderment, "Things are happening all right. I've had panics all week, not bad ones, puzzling ones. They were all in the wrong places. I do my regular work in the way I want to, I've increased my work-load. I go back and forth to my office O.K. But what happens is something silly. I put on one of my shoes perfectly comfortably but as I reach for the other, my panic hits me hard for a moment, then disappears and I put on the other shoe comfortably. I drive into the garage, turn off the ignition, get out of the car, lock the garage door, and a sudden panic hits me but by the time I've put my car keys in my pocket, the panic is gone. What's more, every panic I get makes me more amused, it's so silly and so short. I don't even mind them. It's funny how a man can get so panicky and suffer the way I did for so long when now it is so brief and so amusing.

"I wonder if the reason for these panics isn't my wife's irritation with me. She has always wanted me to see things her way and it always made me mad. So I wonder if I get into these panics because they irritate the hell out of her. You know, I think that's the underlying cause. What I suspect is that somehow you are making me tear up the old problem and scatter it around like confetti. I wonder if that's what I'm doing, tearing up my problem and just throwing it to the wind. I wonder why in three years I never told my analyst about my wife's antagonism.

Four or 5 or more hours a week for 3 years ought to drain dry every idea a man has. Why did I tell you? You never asked! Oh yes, I played two days of golf the way I like to play, no drinking, no panics. Then on the way here, I got a panic as I stepped outside the office building and so I went into the (adjacent) bar, ordered 3 double shots of whiskey, paid for them, looked at them all lined up for me and never saw a sillier thing in my life. So while the bartender just stared at me and the untouched drinks, I walked out. I didn't have a panic.

"Now you have been writing about $\frac{1}{2}$ hour on what I've been telling you, and that clock there says its half-past the hour and I'm willing to bet the next time I look at it, it will be on the hour." (The implications of this remark are obvious.)

Slowly, gravely, the answer was given, "You are entirely right." Immediately his eyes closed and a deep trance ensued at once. He was promptly asked to review the progress *he had made* and the account of the current interview was read slowly to him. As he listened, his head slowly nodded perseveratively in an affirmative fashion.

Exactly on the hour, he was told, "It's just as you said, it's exactly the hour by the clock." He aroused, stretched, yawned, and asked, "How about next week, same time?"

The appointment was made.

As he left the office, he remarked, "I'm reading this (taking from his jacket pocket) delightful book. Would you like to read it when I'm finished?" He was assured that it would be a pleasure.

The next meeting was most enlightening. As he entered, he remarked, "I'm enjoying these conversations. I'm understanding. For years I have unconsciously resented my wife in one way only. Her father died when she was an infant, and her mother swore she would be a father to the little baby. She was. She still is, and my wife is like her mother. She wears all the pants in the home. Mine, and my son's too. She is completely the man in the house in every way. But we are so compatible in every other way, and we are deeply in love with each other, and she always decides things the right way. The thing is, I would like permission from her to make the decision she is going to make anyway. No, that's wrong. I want no permission, I just want to make decisions and let her agree with them because my decision is right, instead of my agreeing with her decisions because they happen to be the ones I would make. Funny, I never even talked about all this in the three years' time in psychoanalysis; now I wonder why I have told you all this when I didn't even think highly of hypnosis. And last Sunday, I laughed to myself. My wife announced that she was taking me and the kids to an entertainment that I wanted to attend, and she knew it. But I decided I would just stay home and I told her so. I really enjoyed doing it and I felt greatly afflused. It was worth missing it. I just felt like a happy little boy who had successfully asserted himself."

"Now with your permission, I'm going to—no, I don't want your permission because I decided to do it and I've been doing it for almost a week. What I do is this. The first day I got in my car, I deliberately had a short panic after the first block or two, and then drove on to the office comfortably. The next day I drove still further and deliberately had another brief panic and drove on. The same thing is done when I go home. I've only got about enough distance left for about 4 or 5 more short panics. Then I'll be through. But I'm not going to stop seeing you. It's worth it to have a conversation with you once a week if you don't mind and I expect to be charged for it."

Therapy has continued in this fashion; at first a simple report by the patient of his "own behavior" with no expectation of any comment from the author and a general conversation on various related topics. Thus did the patient take over the responsibility of his own therapy, doing it in his own way at his own speed.

He is still continuing his weekly visits, sometimes on a purely social level, sometimes discussing the teen-age behavior of his children not as a problem but as an interesting contrast to his own. His own problem has vanished so far as any personal difficulties are concerned. That he is willing to pay a psychiatric fee for social visits suggests that unconsciously the man wants the assurance of a continued friendship for some length of time from one who aided him to achieve a satisfying sense of masculine dominance without compelling him to go through a long, dependent, submissive, and fruitless relationship in search of therapy, but who, instead, simply placed the burden of responsibility for therapy upon him and his own unconscious mind. However, as the weeks go by the evidence is building that he will soon be reducing the frequency of his visits. Early summer plans have been repeatedly mentioned and these, as they are outlined, will make visits impossible. Thus, his unconscious mind is informing the author of the impending termination. Invariably he goes into a spontaneous trance of 5 to 10 minutes duration as the end of the hour approaches. In this trance he remains silent and so does the author.

Similar therapeutic procedures have been employed in the past, not exactly in this fashion but in a decidedly comparable manner. One patient will make an appointment phrasing his request, "so that I can have my batteries recharged" (meaning a trance, sometimes with helpful suggestions, sometimes merely a trance). Other patients come in seemingly for no more than a "casual" conversation, eventually discontinuing this practice. In the past, such therapeutic procedures have sufficed to achieve long-term satisfactory results, as witnessed by follow-up inquiries 5 and 10 years later.

SECOND FIELD EXPERIMENT

ANOTHER UNEXPECTED OPPORTUNITY arose to test the above technique. A 24-year-old-girl who became acutely disturbed in 1961 by visual and auditory hallucinations of a persecutory character, developed many persecutory delusions, became antagonistic (she was the youngest) toward her two siblings and her parents, and finally had to be hospitalized on an emergency basis where her case was diagnosed as schizophrenia, paranoid type, with a doubtful prognosis.

"Psychodynamically oriented" psychotherapy was undertaken by various psychoanalytically trained psychiatrists. The girl, a college student of decidedly superior intelligence, made mockery of them, ridiculed psychoanalytic concepts, placed the psychoanalysts in a self-defensive position or else angered them and was regarded by them as "not amenable to any kind of psychotherapy." Electroshock therapy was recommended but refused possibly by both the relatives as well as by the patient. (The father, a dentist, had sought counselling on the matter from two other psychiatrically trained psychotherapists who had advised against it as too soon to be warranted. Hence it is not known whether the father or the patient refused, or both, the patient stating very simply, "I would not tolerate having my brains scrambled for thumb-pushes on a button at \$30.00 a push").

She was asked what she wished of the author. Her statement was, "I have a

fainly that think you can hypnotize me into sanity as they call it. God, how I hate them. So they just signed me out of the state hospital and brought me here willy-nilly. Now what kind of an ass are you going to make of yourself?"

"None at all I hope, regardless of my potentialities. I'm not going to psychoanalyse you, I'm not going to take your history, I don't care about your Oedipus complex or your anal phase, I'm not going to Rorschach you or T.A.T. you. I'm going to show you a letter from your father (which reads in essence 'My college daughter 22 years old is very disturbed mentally. Will you accept her for therapy?') and my answer to him (which reads in essence 'I shall be glad to see your daughter in consultation.') I do have one question to ask you, What did you major in?"

She answered, "I was going to major in psychology, but things began to go wrong so I just switched in my junior year to English, but I've read a lot of that crap called psychology. And I am fed up to the ears with psychoanalysis."

"Good, then *I won't have to waste your time or mine*. You see, all I want to do is *to find out if we can understand each other*. Now be patient with me and let me ramble on. You're here on a two-hour appointment and as long as you're going to be bored, let it be as boresome as can be."

Promptly she said, "Well, at least you are honest, most psychiatrists think they are interesting."

Very rapidly the author then explained that he was going to read to her a paper he had just written (she interjected, "Do anything to get an audience, wouldn't you?") and immediately, he had, as in the preceding case, asked her to put both feet on the floor, her hands on her thighs, to stare steadily at the clock, being sure that she just "plain resented" the boredom "instead of going to sleep." (She knew that the author employed hypnosis, and this precluded her from thinking hypnosis would be used).

Systematically the technique described above was used again almost verbatim. The only difference was that the author proceeded more slowly, and at first there was much repetition by varying slightly the words but not the essence of their meaning.

At first her expression was one of scornful mockery but she suddenly declared in amazement, "My right hand is lifting, I don't believe it, but it is and I'm not in a trance. Asked if her unconscious mind thought it could communicate with me. In astonishment she declared, "My head is nodding 'yes' and I can't stop it, and my right index finger is also lifting too. Maybe my unconscious mind can communicate with you, but make them stop moving."

"If your unconscious mind wants to stop them, it will do so itself" was the answer given to her.

Almost at once she said, "Oh, they've all stopped, so now maybe if you just ask me the questions, I can get at some stuff that I know I've repressed. Will you please go ahead?"

Her eyes closed, a spontaneous trance developed, therapeutic rapport was well-established before the two hours were up, and the girl is now a most eager, cooperative and thoroughly responsive patient, making excellent progress.

This was but another impromptu field experiment prompted by the overt hostility of the opening of the session. She had been seen for less than 10 hours when her family expressed the belief that she was better than she was at anytime

previously in her life. She, however, laughingly stated, "You don't live with mixed up ideas such as I had so long as I did without learning that there is a terrific interweaving in all of your thinking. I want to stay in therapy and just keep on learning to understand myself."

Following the first 10 hours, she enrolled in college where she is making an excellent adjustment seeing the author once a week. She discusses objectively, well and understandingly her past symptomatic manifestations as emotionally violent experiences belonging to the past and usually terminates the therapeutic hour with a 15 to 20 minute trance.

THIRD FIELD EXPERIMENT

BEFORE THIS PAPER had been typed in final form a third patient with a totally different type of resistance came into the office. Her condition was recognizable at once. She walked with a controlled rigidity of her body, stepping softly. The right side of her face was one of obviously controlled frozen immobility, she spoke clearly and lucidly with a patterned left-sided mouthing of her words, her right eye blink was markedly reduced, her right arm movements were constrained and hesitant and when she moved her hand toward the right side of her face, such movement was slower and definitely guarded in comparison with her left arm movements, which were free and easy, and decidedly expressive.

To spare the patient, she was asked immediately, "How long have you had trigeminal neuralgia? Answer in the fewest possible words and slowly, since I do not need too much history *to begin your therapy.*"

Her reply was "Mayos', 1958, advised against surgery, against alcohol injections, told there was no treatment, have to put up with it and endure it all my life, (tears rolled down her cheeks) a psychiatrist friend said maybe you help."

"You working?"

"No, leave of absence psychiatrist friend say see you—get help."

"Want help?"

"Yes."

"No faster than I can give it?" (that is, would she accept help at the rate I considered best. I wanted no expectation of a "miracle cure.")

"Yes."

"May I start work on you now?"

"Yes, please, but no good, all clinics say hopeless, painful. Everybody enjoy himself but I can't. I can't live with my husband, nothing, just pain, no hope, doctors laugh at me see you for hypnosis."

"Anyone suspect psychogenic origin of pain?"

"No, psychiatrists, neurologists, Mayos—all clinics say organic, not psychogenic."

"And what advice do they give you?"

"Endure; surgery, alcohol, last resort."

"Do you think hypnosis will help?"

"No, organic disease, hypnosis psychological."

"What do you eat?"

"Liquid."

"How long does it take to drink a glass of milk?"

"Hour, longer."

"Trigger spots?"

In a gingerly fashion she pointed at her cheek, nose, and forehead.

"So you really think hypnosis won't work! Then why see me?"

"Nothing helps, one more try only cost a little more money. Everybody says no cure. I read medical books."

This was far from a satisfactory history but the simplicity and honesty of her answers, and her entire manner and behavior were convincing of the nature of her illness, its acute and disabling character, the reality of her agonizing pain, and her feeling of desperation. Her pain was beyond her control, it did not constitute a condition favorable to hypnosis; she was well-conditioned over a period of 30 to 40 out of 60 months (as was afterwards learned) by the experience of severe uncontrollable pain with occasional brief remissions, and all respected medical authorities had pronounced her condition as incurable and had advised her "to learn to live with it and, only as a last resort, to try surgery or alcoholic injections." She had been informed that not even surgery was always successful and surgical residuals were often troublesome. One man only, a psychiatrist who knew the author, advised her to try hypnosis as a "possible help."

In view of this well-established background of learning and conditioning based upon long experience, direct hypnosis was regarded as inviting a probable failure. Accordingly the technique for resistant patients was employed. She was allowed to sit and watch the author which she did with desperate attention. No suggestion of voice, "*Before I make any beginning of any sort I want to offer you some explanation.*" Then we can begin." Very gently she nodded her head affirmatively.

The author proceeded at once with the technique described above, referring openly to the typed manuscript to make the repetition of it as verbatim as possible,

She responded to the technique with remarkable ease, demonstrated ideomotor movements of her head and arm catalepsy.

There was added to the technique the additional statements that an inadequate history had been taken, that her unconscious mind would search through all of its memories, and that she would communicate freely (to do so "freely" would imply "comfortably") any and all information desired, there should be a careful search of her unconscious mind of all possible ways and means of controlling, altering, changing, modifying, re-interpreting, lessening, or in any other way doing whatever was possible to meet her needs. She was then given the posthypnotic suggestion that she would again sit in the same chair and depend upon her unconscious mind to understand the author and his wishes. Slowly, perseveratively, she nodded her head in the affirmative.

She was aroused from the trance by saying, "As I just said, '*Before I make any beginning of any sort, I will want to offer you some general explanation.*' Then we can begin.'" To this was added with a pointed inflection, "Is that all right with you?" Slowly, over a period of two minutes, she opened her eyes, shifted her position, wiggled her fingers, twisted her hands, and then answered very easily and comfortably in marked contrast to her previous labored and guarded answers, "That will be perfectly all right." Immediately, in a most startled fashion, she exclaimed, "Oh my goodness, what happened? My voice is all right and it doesn't hurt to talk." With this she gently closed her mouth and slowly tightened the masseter muscles. Promptly she opened her mouth and said, "No, the neuralgia is there just as severe as ever, but I'm talking without any pain. That's funny

I don't understand. Since this attack began it's been almost impossible to talk and I don't feel the air on my trigger points." She fanned her cheek, nose and right forehead, and then gently touched her nose with a resulting spasm of extreme pain.

When this had subsided she said, "I'm not going to try the other trigger spots even if my face does feel different and I have normal speech."

She was asked, "How long have you been in this room?" Wonderingly she replied, "Oh 5 minutes, at the very most 10, but not really that long." The face of the clock was turned toward her (its position had been carefully changed during her trance). In utter bewilderment she exclaimed, "But that's impossible. The clock shows more than an hour!" Pausing, she slid her watch from under her sleeve and said again (since her watch and the clock agreed) "But that's utterly impossible" to which the author said with great intensity, "*Yes, it is quote utterly impossible unquote but not in this office.*" (The indirect hypnotic suggestion is obvious to the reader but it was not to the patient.)

She was given an appointment for the next day and rapidly ushered out of the office.

Upon entering the office she was asked before she took her seat, "And how did you sleep last night. Did you dream?"

"No, no dreams, but I kept waking up over and over all night long, and I kept having the funny thought that I was waking up to take a rest from sleeping or something."

She was told, "*Your unconscious mind understands very well and can work hard but first, I want a full history on you before we work so sit down and just answer my questions.*"

Searching inquiries revealed a well-adjusted parental home, a happy childhood, and excellent college, marital, economic, social and professional adjustments. It was also learned that her first attack had begun in 1958, had lasted continuously for 18 months during which time she had futilely sought medical or surgical aid from various well-known clinics, had undergone psychiatric examinations to rule out possible psychogenic factors, and had consulted various prominent neurologists. She was a psychiatric social worker, and had a cheerful habit of softly whistling merry tunes almost continuously while at work or even walking down the street. She was exceedingly well-liked by her colleagues and explained that she had been referred to the author by an old-time friend of his, but that all others had commented most unfavorably about hypnosis. To this she added, "Just meeting a medical man who uses hypnosis has already helped me. I can talk easily, and this morning when I drank my glass of milk I did it in less than 5 minutes, and it usually takes an hour or more. So it wasn't a mistake to come here."

The reply was given, "I'm glad of that." Her eyes glazed and spontaneously she developed a deep trance.

The details of the indirect suggestions to the effect that her unconscious could do what it desired will not be given. Partial remarks, remarks with implications, double binds, and making one thing contingent upon something entirely unrelated when read seem much too meaningless to report. When spoken, the intonations, the inflections, the emphases, the pauses, and all the varying implications and contingencies and double binds that could thus be created set into action a wealth of activities for which variously disguised instructions could be given. For example, one statement was that the cracking of a Brazil nut with her teeth on the right side of her mouth

would really be most painful but, thank goodness, she had better sense than to try to crack Brazil nuts or hickory nuts with her teeth, especially on the right side of her mouth for the reason that it would be so painful *and not at all like eating*. The implication here is most emphatically that eating is not painful. Another was, "It's just too bad that that first bite of filet mignon will be so painful when *the rest of it will be so good.*" Again the implication could not be fully recognized since the author immediately digressed to some other type of suggestion.

She was aroused from the trance state by the simple remark, "Well, that's all for today." Slowly she awakened and looked expectantly at the author. Pointedly he directed her attention to the clock. She explained, "But I just got here and told you about the milk and, (looking at her watch) a whole hour has gone by! Where did it go?" Airily, flippantly (so that she could not suspect the reply) the author said, "Oh, the *lost time has gone to join the lost pain,*" and she was handed her appointment card for the next day and quickly ushered out of the office.

The next day she entered the office to declare, "I had filet mignon last night and the first bite was awful agony. But the rest of it was wonderful. You can't imagine how good it was and the funny thing is that when I combed my hair this morning I got a silly urge to jerk locks of it here and there. It made me feel so foolish but I did it and I was watching my strange behavior and I noticed my hand resting on my right forehead. It isn't a trigger spot any more. See (demonstrating), I can touch it anywhere."

At the end of four hour-long sessions her pain was gone, and she raised the question at the 5th, "Maybe I ought to go back home." In a jocular manner the author said, "*But you haven't learned how to get over the recurrences!*"

Immediately her eyes glazed, closed, a deep trance ensued, and the author remarked, "*It always feels so good when you stop hitting your thumb with a hammer.*"

A pause, then her body stiffened in a sudden spasm of pain, and then almost as quickly relaxed and she smiled happily. Flippantly the author said, "Oh, phooey, you need more practice than that, *work up a sweat with a half dozen*, that will really make you realize that you've had excellent practice." (Flippancy does not belong in a dangerous or threatening situation, only where the outcome is certain to be pleasing.) Obediently she did as asked and beads of perspiration formed on her forehead. When she had finally relaxed, the comment was made, "Honest toil brings beads of perspiration to the brow—there's a box of tissue there; why not dry your face." Taking her glasses off, and still in the trance, she reached for a sheet of tissue and mopped her face. She dried her right cheek and her nose as briskly as she had the painless left side of her face. No mention of this was made directly, but the seemingly irrelevant comment was made, "You know, it's nice to do things remarkably well and yet not know it." She merely looked puzzled except for an odd little smile of satisfaction. (Her unconscious was not yet "sharing" the loss of the trigger spots of her cheek and nose.)

She was aroused with the statement, "And now for tomorrow;" handed her appointment card, and promptly dismissed.

As she entered the office at the next appointment she remarked, "I just am at a loss about everything today. I don't need to come, but I'm here and I don't know why. All I know is the steak tastes good and I can sleep on my right side and everything is all right but here I am." The answer given was, "Certainly you are here, just sit down and I'll tell you why. Today is your 'doubt day' since anybody who has

lost that much trigeminal neuralgia so fast is entitled to some doubts. So, slap your left cheek hard." Promptly she administered a swift stinging slap, laughed and said, "Well, I'm obedient, and that slap really stung."

With a yawn and a stretch the author said, "Now slap your right cheek the same way." There was marked hesitation followed by a quick slapping movement, the force of which was greatly reduced at the last fraction of a second. The author promptly remarked rather mockingly "Pulled your punch, pulled your punch, had a doubt, didn't you, but how does your face feel?" With a look of astonishment she answered, "Why, it's all right, the trigger point is gone and there is no pain." "Right. Now do as I told you *and no more pulling your punch.*" (One does not yawn and stretch and speak mockingly by a patient who might have agonizing pain, but she could not analyze this.)

Very quickly and forcibly she slapped her right cheek and nose with a stinging blow and remarked, "I did have a doubt the first time but I haven't got any now, not even about my nose because I hit that too but I didn't have that in mind." Thoughtfully she paused and then struck her forehead hard with her fist. She remarked, "Well, there's the end of doubts" her tone of voice both jocular and yet intensely pleased. In a similar manner the author remarked, "Astonishing how some people have to have a little understanding literally pounded into their heads." Her immediate reply was, "It's obvious there was room for it." We both laughed and then, with a sudden change of manner to one of utter intentness and gravity, she was told with slow heavy emphasis, "*There is one thing more I want to tell you.*" Her eyes glazed, a deep trance ensued. With careful impressive enunciation she was given the following post-hypnotic suggestion. "You like to whistle, you like music, you like meaningful songs. Now I want you to make up a song and a melody using the words 'I can have you anytime I want you, But, Baby there ain't never gonna be a time when I want you,' and forever and always, as you whistled that tune you will know, and I do not need to explain, since you know!" Slowly perseveratively her head nodded affirmatively. (The burden of responsibility was hers, the means was hers.)

She was aroused by the simple statement, "Time really travels fast, doesn't it?" Promptly she awakened and looked at the clock and said, "I'll never understand it." Before she could proceed, she was interrupted with, "Well, the deed is done and cannot be undone, so let the dead past bury its dead. Bring me only one more good tomorrow and you will go home tomorrow, with another good tomorrow and another and another, and all the other good tomorrows are forever yours. Same time" (meaning appointment for the next day at the same hour). She left the office without delay.

The final interview was simply one of a deep trance, a systematic comprehensive review by her within her own mind of all of the accomplishments and the gentle request to believe with utter intensity in the goodness of her own body's potentials in meeting her needs and to be "*highly amused* when the skeptics suggest that you have had remissions before followed by relapses." (The author is well aware of the deadliness of skeptical disparaging remarks and of the engendering of iatrogenic disease.) Correspondence received since her return home has confirmed her freedom of pain and also that a neurologist, antagonistic toward hypnosis, offered her a long argument to the effect that the relief she experienced would be most transient and that there would be a relapse (an unwitting effort to produce iatrogenic dis-

ease). She related this, stating that his argument had made her feel "highly amused," thereby quoting directly from the author's own post-hypnotic suggestion.

DISCUSSION AND COMMENTS

IN PREVIOUS PUBLICATIONS, this author has repeatedly indicated indirectly or directly that the induction of hypnotic states and phenomena is primarily a matter of communication of ideas and the elicitation of trains of thought and associations within the subject and consequent behavior responses. It is not a matter of the operator *doing* something to a subject or *compelling* him to do things or even *telling him what to do and how to do it*. When trances are so elicited, they are still a result of ideas, associations, mental processes and understandings already existing and merely aroused within the subject himself. Yet too many investigators working in the field regard *their activities* and *their intentions and desires* as the effective forces, and they actually uncritically believe that their own utterances to the subject elicit, evoke, or initiate specific responses without seeming to realize that what they say or do serves only as a means to stimulate and arouse in the subjects past learnings, understandings and experiential acquisitions, some consciously, some unconsciously acquired. For example, the affirmative nodding of the head and the negative shaking of the head is not a deliberate intentional supervised learning and yet it is something that becomes a part of verbalized or non-verbalized overt communication, or an expression of the mental processes of the person who thinks he is merely listening to a lecturer addressing an audience, which is unrecognized by the self but visible to others. Then, too, as another example, one learns to talk and to associate speech with hearing and we need only to watch the small child learning to read to realize that the printed word, like the spoken word, becomes associated with lip movements and, as experiments have shown, with subliminal laryngeal speech. Hence when a severe stutterer endeavors to talk, definite effort is required by the listener to keep his lips and tongue from moving and to refrain from saying the words for the stutterer. Yet, there never was any formalized or even indirect teaching of the listener to move his lips, his tongue, or to speak the words for the stutterer. Nor does the stutterer want the other person to do it; he even resents it strongly. But this experiential learning is unconsciously acquired and is elicited by stimuli not even intended to do so but which set into action mental processes within the listener at an involuntary level, often uncontrollable and even known to be likely to incur bitter resentment on the part of the stutterer. The classic joke in this connection is that of the stutterer who approached a stranger and stammered painfully a request for directions. The stranger pointed to his ears and shook his head negatively and the stutterer made his inquiry again of another bystander who gave the directions. Thereupon the bystander asked the man who had indicated that he was deaf why he had not replied and received the badly stuttered reply of, "Do you think I wanted my head knocked off?" His reply disclosed eloquently his full knowledge of his own intense resentments when somebody tried to "help" him to talk or seemed to mock him.

Yet the stutterer has not asked directly or indirectly for the other person to say his words for him; the listener knows it will be resented and does not want to do it, yet the distressing stimuli of stuttered words elicits his own long-established patterns of speech. So it is with the stimuli, verbal or otherwise, employed in induction

techniques and no one can predict with utter certainty just how a subject is going to use such stimuli. One names or indicates possible ways, the subject behaves in accord with his learnings. Hence the importance of loosely organized comprehensive permissive suggestions and the relative unimportance of ritualistic traditional techniques blindly used in rote fashion.

On several occasions this author has had opportunity to do special work with congenitally deaf people, and those who had acquired nerve deafness in childhood, one an instance of a man who acquired nerve deafness after the age of 30, and one an instance of a woman who had acquired nerve deafness after the age of 40. All of these people had been trained in "lip reading," although most of them explained to the author that "lip reading" was "face reading," and all of them could do sign language. To prove this, one of these deaf people took the author to listen to a Sunday sermon by a heavily-bearded minister and, by sign language, "translated" to show that he was "face reading," since the author then could read sign language. Further experimentation with this deaf man disclosed that if the minister spoke in a monotone or whispered, his face could not be "read."

With these deaf people, an experiment was done in which it was explained that an assistant would write on a blackboard various words and that several adults (college level) would face the blackboard and merely silently watch the writing, making no comment of any sort. It was also explained to these adults that, separately, strangers would be brought in and placed in a chair facing them with their backs to the blackboard and continuing to face them as the assistant did the writing. They were not told that the strangers were deaf and could "lip read."

The deaf persons were fully aware that they were to "read the faces" before them and that they would be reading silently what the assistant was writing, but one additional fact was not disclosed.

In beautiful Spencerian script in large letters the assistant wrote words of varying numbers of syllables. What only the author and the assistant knew was that the words were written to form designs of a square, a diamond, a star and a triangle by the process of placing the words at the strategic points of the angles of the figures. A circle (the last figure) had been previously written on a black cardboard and was hung up on the blackboard. This latter was formed by the fewest possible and shortest words to permit easier reading as well as the design recognition.

The deaf persons were sitting behind a barrier just high enough to conceal their hands. As the assistant wrote, the author sat so he could see only the deaf persons' hands. The author could not see the blackboard nor did he know the order of the designs or what the words were. He did know that a list of possible words had been made by him and the assistant but that only about a third of them would be required and that the assistant would make his own choices. Furthermore, for each deaf person, each design except the circle would be in a different sequential order.

One subject (the deaf woman who had acquired nerve deafness after the age of 40) made a perfect score. Not only were the written words "read" by her in the faces of the adults watching the writing, but so were the identities of the designs. Moreover, she told the author in sign language that there was "something wrong" with the words "square," "diamond," and "triangle," and something was "a little bit funny" about the word "star," and something "very funny" about the word "circle." One must add, however, that this woman was exceedingly paranoid, psychotically so. None of the others had a perfect record. One man gave all the replies except

"circle." He "sign languaged" that the last series of words was written differently, but he could not explain how he identified all of the written words forming the circle. The other subjects all identified the written words, experienced some mild confusion about the words forming the circle, and missed "star" and "circle." This group all felt that they had missed two of the "words." All except the paranoid psychotic patient were allowed to see the blackboard and the observers all were surprised to find that the strangers had read their facial expressions for both the design recognition as well as the written words.

This experiment was long in the author's mind in relation to the development of his own personal approach to the induction of hypnosis. Therefore keeping well and clearly in mind his actual wishes the author casually and permissively (or apparently permissively) presents a wealth of seemingly related ideas in a manner carefully calculated to hold or to fixate the subject's attention rather than the subject's eyes or to induce a special muscle state. Instead, every effort is made to direct the subject's attention to processes within himself, to his own body sensations, his memories, emotions, thoughts, feelings, ideas, past learnings, past experiences, and past conditions, as well as to elicit current conditionings, understandings and ideas.

In this way, it is believed by the author, hypnosis can be best induced and that a good hypnotic technique so organized can be remarkably effective even under seemingly highly adverse circumstances. However, the author has so far always failed with behavior merely personally objectionable to the subject but entirely legitimate. An account of an instance of this is given in THIS JOURNAL,* VOL VI, 3, Pp. 201, and more than one otherwise compliant subject has "shut off my hearing," or awakened.

In this particular paper a total of 4 subjects were dealt with by a single technique with only slight modifications to meet the requirements of sex, intelligence, and educational level. All 4 represented different types of resistance, different backgrounds and different types of problems. One was a rather severely maladjusted person, the second was unhappily governed by peculiar circumscribed uncontrollable maladjustments, the third had a long history of general maladjustment eventuating in a state hospital commitment with a diagnosis of "psychosis, paranoid type, probably schizophrenic," and the fourth was a patient diagnosed repeatedly at competent clinics and by competent neurologists and psychiatrists as suffering from a hopeless organic condition characterized by occasional brief terrors and treatable only in a partially satisfactory manner by organic measures entailing undesirable results. Five years experience of excruciating pain had firmly convinced and conditioned this last patient to the understanding that the condition was untouchable by psychological measures, and only hopeless desperation led to the seeking of hypnotherapy.

The technique employed so successfully upon 4 such diverse patients was essentially a rigid arresting and fixation of their attention and then placing them in a situation of extracting from the author's words certain meanings and significances that would fit into the patterns of their own thinking and understanding, their own emotions and wishes, their own memories, ideas, understandings, learnings, conditionings, associational and experiential acquisitions, and into their own patterns of response to stimuli. The author did not really instruct them. Rather he made statements casually, repetitiously, permissively, yet authoritatively, but in a

*Amer. J. Clin. Hypn.

manner so disguised that their attention was not directed away from their own inner world of experience to the author but remained fixated upon their own inner processes. Consequently a hypnotic trace state developed, one in which they were highly receptive to any general ideas that might be offered to them to examine and to evaluate and to discover for themselves any applicability to their problems. For example, the second patient was not told to develop his brief and "silly" panics, nor was he told what plan to work out governing his control of his daily trips. Nor was the origin of his condition ever asked for; his intelligence told him it had an origin and there was no need to tell him to search for it.

As for the patient with trigeminal neuralgia, neither analgesia nor anesthesia was suggested. Nor was there a detailed personal history taken. She had been repeatedly diagnosed by competent clinics, neurologists and psychiatrists as suffering from an organic painful disease, not a psychogenic problem. She knew these facts, the author could understand without any further mention or repetition. Neither was she offered a long and "helpful" discussion of what pain was and various methods of lessening or minimizing, altering or reconditioning her suffering. *No matter what the author said, she was dependent upon her own resources only.*

Hence, no more than was necessary was said to initiate those inner processes of her own behavior, responses and functionings which would be of service to her. Therefore direct mention was made that the first bite of the filet mignon would be painful *but that the rest of it would be so very good.* Out of this simple, yet really involved statement, she had to abstract all the meanings and implications, and in the process of so doing she was forced into an unwitting and favorably unequal comparison of many long years of comfortable and satisfying eating free from pain, with only a few years of painful eating.

As concluding statements, in the therapeutic use of hypnosis, one primarily meets the patient's needs on the terms he himself proposes; and then one fixes the patient's attention, through adequate respect for and utilization of his method of presenting his problem, to his own inner processes of mental functioning. This is accomplished by casual but obviously earnest and sincere remarks, seemingly explanatory but intended solely to stimulate a wealth of the patient's own patterns of psychological functioning so that he meets his problems by use of his learnings already acquired or that will develop as he continues his progress.

The Use of Symptoms as an Integral Part of Hypnotherapy*

IN DEALING WITH ANY TYPE of patient clinically, there is a most important consideration that should be kept constantly in mind. This is that the patient's needs as a human personality should be an ever-present question for the therapist to insure recognition at each manifestation. Merely to make a correct diagnosis of the illness and to know the correct method of treatment is not enough. Fully as important is that the patient be receptive of the therapy and cooperative in regard to it. Without the patient's full cooperativeness, therapeutic results are delayed, distorted, limited or even prevented. Too often the therapist regards the patient as necessarily logical, understanding, in full possession of his faculties, in brief, a reasonable and informed human being. Yet it is a matter of common knowledge often overlooked, disregarded or rejected that a patient can be silly, forgetful, absurd, unreasonable, illogical, incapable of acting with common sense, and very often governed and directed in his behavior by emotions and by unknown, unrecognizable and perhaps undiscoverable unconscious needs and forces which are far from reasonable, logical, or sensible. To attempt therapy upon a patient only apparently sensible, reasonable and intelligent when that patient may actually be governed by unconscious forces and emotions neither overtly shown nor even known, to overlook the unconscious mind for possible significant information can lead easily to failure or to unsatisfactory results. Nor should seemingly intelligent, rational and cooperative behavior ever be allowed to mislead the therapist into an oversight of the fact that his patient is still human and hence easily the victim of fears and foibles, of all those unknown experiential learnings that have been relegated to his unconscious mind and that he may never become aware of or ever show just what the self may be like under the outward placid surface. Nor should the therapist have so little regard for his patient that he fails to make allowance for human weaknesses and irrationality. Too often it is not the strengths of the person that are vital in the therapeutic situation. Rather, the dominant forces that control the entire situation may derive from weaknesses, illogical behavior, unreasonableness, and obviously false and misleading attitudes of various sorts.

The therapist wishing to help his patient should never scorn, condemn nor reject any part of a patient's conduct simply because it is obstructive, unreasonable or even irrational. The patient's behavior is a part of the problem brought into the office; it constitutes the personal environment within which the therapy must take effect; it may constitute the dominant force in the local patient-doctor relationship. Since whatever the patient brings in to the office is in some way both a part of him and a part of his problem, the patient should be viewed with a sympathetic eye appraising the totality which confronts the therapist. In so doing the therapist should not limit himself to an appraisal of what is good and reasonable as offering possible foundations for therapeutic procedures. Sometimes, in fact, many more times than is real-

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ized, therapy can be firmly established on a sound basis only by the utilization of silly, absurd, irrational, and contradictory manifestations. One's professional dignity is not involved but one's professional competence is.

To illustrate from clinical experience, case history material will be cited, some from a non-hypnotic therapeutic situation, some from situations involving the use of hypnosis.

CASE REPORT 1

GEORGE HAD BEEN A PATIENT in a mental hospital for five years. His identity had never been established. He was simply a stranger around the age of 25 who had been picked up by the police for irrational behavior and committed to the state mental hospital. During those five years he had said, "My name is George," "Good morning," and "Good night," but these were his only rational utterances. He uttered otherwise a continuous word-salad completely meaningless as far as could be determined. It was made up of sounds, syllables, words, and incomplete phrases. For the first three years he sat on a bench at the front door of the ward and eagerly leaped up and poured forth his word-salad most urgently to everyone who entered the ward. Otherwise, he merely sat quietly mumbling his word-salad to himself. Innumerable efforts had been made by psychiatrists, psychologists, nurses, social service workers, other personnel and even fellow patients to secure intelligible remarks from him, all in vain. George talked only one way, the word-salad way. After approximately three years he continued to greet persons who entered the ward with an outburst of meaningless words, but in between times he sat silently on the bench, appearing mildly depressed but somewhat angrily uttering a few minutes of word-salad when approached and questioned.

The author joined the hospital staff in the sixth year of George's stay. The available information about his ward behavior was secured. It was learned also that patients or ward personnel could sit on the bench beside him without eliciting his word-salad so long as they did not speak to him. With this total of information a therapeutic plan was devised. A secretary recorded in shorthand the word-salads with which he so urgently greeted those who entered the ward. These transcribed recordings were studied but no meaning could be discovered. These word-salads were carefully paraphrased, using words that were least likely to be found in George's productions and an extensive study was made of these until the author could improvise a word-salad similar in pattern to George's, but utilizing a different vocabulary.

Then all entrances to the ward were made through a side door some distance down the corridor from George. The author then began the practice of sitting silently on the bench beside George daily for increasing lengths of time until the span of an hour was reached. Then, at the next sitting, the author, addressing the empty air, identified himself verbally. George made no response.

The next day the identification was addressed directly to George. He spat out an angry stretch of word-salad to which the author replied, in tones of courtesy and responsiveness, with an equal amount of his own carefully contrived word-salad. George appeared puzzled and, when the author finished, George uttered another contribution with an inquiring intonation. As if replying the author verbalized still further word-salad.

After a half dozen interchanges, George lapsed into silence and the author promptly went about other matters.

The next morning appropriate greetings were exchanged employing proper names by both. Then George launched into a long word-salad speech to which the author courteously replied in kind. There followed then brief interchanges of long and short utterances of word-salad until George fell silent and the author went to other duties.

This continued for some time. Then George, after returning the morning greeting, made meaningless utterances without pause for four hours. It taxed the author greatly to miss lunch and to make a full reply in kind. George listened attentively and made a two hour reply to which a weary two hour response was made. (George was noted to watch the clock throughout the day.)

The next morning George returned the usual greeting properly but added about two sentences of nonsense to which the author replied with a similar length of nonsense. George replied, "Talk sense, Doctor." "Certainly, I'll be glad to. What is your last name?" "O'Donovan and it's about time somebody who knows how to talk asked. Over five years in this lousy joint" . . . (to which was added a sentence or two or word-salad). The author replied, "I'm glad to get your name, George. Five years is too long a time" . . . (and about two sentences of word-salad were added).

The rest of the account is as might be expected. A complete history sprinkled with bits of word-salad was obtained by inquiries judiciously salted with word-salad. His clinical course, never completely free of word-salad which was eventually reduced to occasional unintelligible mumbles, was excellent. Within a year he had left the hospital, was gainfully employed, and at increasingly longer intervals returned to the hospital to report his continued and improving adjustment. Nevertheless, he invariably initiated his report or terminated it with a bit of word-salad, always expecting the same from the author. Yet he could, as he frequently did on these visits, comment wryly, "Nothing like a little nonsense in life, is there Doctor?" to which he obviously expected and received a sensible expression of agreement to which was added a brief utterance of nonsense. After he had been out of the hospital continuously for three years of fully satisfactory adjustment, contact was lost with him except for a cheerful postcard from another city. This bore a brief but satisfactory summary of his adjustments in a distant city. It was signed properly but following his name was a jumble of syllables. There was no return address. He was ending the relationship on his terms of adequate understanding.

During the course of his psychotherapy he was found hypnotizable, developing a medium to deep trance in about 15 minutes. However, his trancelike behavior was entirely comparable to his waking behavior and it offered no therapeutic advantages, although repeated tests were made. Every therapeutic interview was characterized by the judicious use of an appropriate amount of word-salad.

The above case represents a rather extreme example of meeting a patient at the level of his decidedly serious problem. The author was at first rather censoriously criticized by others but when it became apparent that inexplicable imperative needs of the patient were being met, there was no further adverse comment.

The next report is decidedly different. Although no psychosis was involved, there existed such an irrational rigidity of emotional conviction that the patient appeared to be inaccessible.

CASE REPORT 2

A MAN IN HIS EARLY FORTIES approached a dentist friend of the author, explaining his situation at great length, perspiring freely as he did so and manifesting much fear and trepidation. His account was that he had recently read a news story about the use of hypnosis in dentistry. This reminded him of his college days when he had many times acted as a hypnotic subject for experimental purposes in the psychology laboratory. In these experiences he easily and invariably achieved the somnambulistic state with profound amnesias still persisting for his trance experiences as such, but with a still present fair memory of the experimental accounts subsequently shown to him.

For some reason not recalled by him but referred to as "some horribly painful experience connected with dentistry in some way" he had not visited a dentist for over 20 years despite the fact that he was well aware that he was seriously in need of dental care. His direct explanation was, "I just can't bring myself to see a dentist. Dentistry is a painful thing. It has to be painful. There are no ifs, ands, or buts about it. Dentistry has to be connected with pain. Even with an anesthetic, there is pain after it wears off. No matter what you do in dentistry, there is some place that becomes terribly sensitive." There was more of this almost irrational obsessional thinking, but the foregoing is an adequate example.

The news story about hypnodontia made him hopeful that in some way his terror of dentistry could be overcome. Hence he made telephone calls about hypnodontia until he located the author's friend.

The dentist agreed to see him and in a preliminary session, gave the patient a careful explanation of hypno-anesthesia. The man developed an excellent somnambulistic trance and easily developed glove anesthesia and then a profound anesthesia of the fingers as tested by overflexing forcibly the terminal phalanx. The dentist then attempted to produce mandibular anesthesia. This failed completely, arousing the dentist's intense interest in the problem apparently confronting him. An entire evening was spent the next day by the dentist endeavoring by one technique or another to produce dental anesthesia. The patient could develop surgical anesthesia anywhere except in relation to his mouth. Instead of anesthesia a seeming hyperesthesia developed.

Another dentist well-experienced in hypnosis was called in to work with the patient hypnotically. The two dentists spent an intensive afternoon and evening with a profoundly somnambulistic hypnotic subject who was surgically anesthetic and able to withstand any painful stimulus they were willing to administer to his body. The patient had his eyes open throughout the trance and he was most interested in his hypnoanesthesia.

However a touch on the patient's lip, chin, or the angle of his jaw would result in a flood of perspiration, a flushing of the skin and complaints that the slightest touch seemed to be extremely painful, and the patient would break down hypnotically established neck and body rigidity in order to wince and to withdraw from such touches.

Other dentists were questioned for suggestions and advice to no avail and the patient was finally sent to the author together with a typed account of the findings of the two dentists and with a typed example of the patient's verbalizations about dental pain.

The interview with the patient and the induction of a deep trance permitted an easy confirmation of the report by the dentists.

Scrutiny of the typed account of his obsessive-like utterances about pain and dentistry, and close listening when he verbalized afresh his convictions about dentistry and pain, suggested a possible likely course of action. Since the dentists had expressed their interest in any experimental work the author might do, the patient was dismissed with an instruction to make an appointment with the first dentist. When the appointment was made the dentist telephoned his friend and the author.

At the proper time the patient appeared and at the author's request took a seat in the dental chair with his face flushed and perspiring and in a general state of utter fear. In spite of that he developed a deep somnambulistic trance in rapport with the two dentists as well as the author.

The intended approach to dental anesthesia and its rationale had been previously discussed with the dentists and the entire procedure, it was agreed, should be done with no preliminary preparation of the patient.

When all was in readiness, the patient, still in a deep somnambulistic trance, tremulous, and with his face flushed and perspiring, was asked to listen closely to a reading of a typed account of his statements about dentistry and pain which included the statements quoted above. He listened with utter intensity and as the last statement was read, he was told seriously and impressively, "You are entirely right, absolutely right, and you summarize it most adequately in one of your statements. Let me read it again, 'No matter what you do in dentistry there is always some place that becomes terribly sensitive.' You are completely correct. As you sit there in the dental chair, the dentist will be to your right. Hence, you may now, at once, safely extend your left hand and arm, there to let it stay suspended as if frozen rigidly in place. And you may turn your face and see it there and as you do so you will note that your left hand, so completely out of reach of everything, safe from any touch, from the slightest breath of air, is becoming so terribly, so awfully, so horribly hypersensitive, so unbelievably hypersensitive that in another minute all of the sensitivity of your entire body will drain into that hand. And since the dentist, in working with you will not touch your hand where all the hypersensitivity is, he can easily do all the dental work you need. Now make an unforgettable mental note of just where that hypersensitive left hand is, and turn your head and let the dentist go to work."

The patient turned his head, fearfully voiced a plea that the dentist be careful of his left hand, and, comforted by the dentist's reassurance, opened his mouth in complete readiness.

The facial flush and the perspiration had vanished. It was noted that his left hand was flushed and perspiring. The dentist then took charge completely and, by means of post-hypnotic suggestions, convinced the patient that each time he sat in the dental chair, he would develop left-handed hyperesthesia so that his dental work could be done. At no time was any oral anesthesia ever suggested.

The rationale of this approach is rather clear and simple. The patient was rigidly fixated on the idea that a painful hypersensitivity must inevitably accompany dentistry. Attempts at oral anesthesia fixated his attention on oral sensations. Acceptance of his neurotic belief and employing it to create hypnotically an area of extreme hypersensitivity met his need to be able to experience pain without having to do so. Thus all pain expectation was centered in his hand, resulting in an anesthesia of the rest of his body, including his mouth.

On the occasion of the termination of the last dental visit, the dentist tested the patient for pain sensitivity elsewhere in his body and found that a general surgical anesthesia existed.

This second case represents the hypnotic utilization, with an augmentation of it, of the actual barrier to the patient's capacity to develop the needful manifestation that he wished. It is true that the logic of the entire procedure is decidedly specious but it must be borne in mind that the patient's total attitudinal set was equally specious. Cold hard logic, presentation of scientific facts, any sensible reasonable approach would have been useless. Utilizing the patient's own neurotic irrationality to affirm and confirm a simple extension of his neurotic fixation relieved him of all unrecognized unconscious needs to defend his neurotism against all assaults. A systematic analysis of exactly what kind of thinking the patient brought into the office led readily to the solution of his problem. This same sort of situation existed in the third case to be cited immediately.

CASE REPORT 3

A THRICE-DIVORCED YOUNG WOMAN sought psychiatric help "For just one problem, that's all, and I will tell you the problem right away but I don't want any treatment for anything else. That you must promise me."

The gist of her story was she had impulsively married at age 18 a handsome and, as she discovered later, dissolute man of 25 very much against parental wishes. The wedding night she discovered that he was a secret alcoholic and the attempted consummation of the marriage in his state of intoxication was a hideous travesty to her. He blamed her entirely, berated her unmercifully, described her rudely as "having a refrigerated derrière," left her alone, and spent the night with a prostitute. Nevertheless, she continued to live with him hopefully despite his continued use of the description that he had bestowed on her the first night. After some months of wretched effort to prove to him that she was a woman of normal sexuality, she secured a divorce, secretly fearing that her former husband was correct in his appraisal of her lack of sexuality.

A year later, in an overcompensatory effort to avoid the kind of trouble she had encountered in her first marriage, she married a highly effeminate man whose latent homosexuality disclosed itself on their wedding night by his horrified aversion to her body. His reason for marrying her, since she did have some wealth in her own name, was to secure "proper social standing in the community." He was completely outraged and incensed by her "indecent haste" to consummate the marriage and administered a rather rigidly prim reprimand. He spent the night, as she learned later, with a male friend who helped bemoan his unfortunate plight. Her reaction was one of complete self-blame, no understanding of her husband's actual sexuality and she succeeded in convincing herself that he had applied the same derogatory description of her as had her first husband. The marriage continued for nearly a year, chiefly by virtue of the fact that he spent most of his nights at his mother's apartment. An actual attempt at consummation after about four months proved to be only a revolting experience for him and a conviction, because of her entire lack of response to him, that she was absolutely lacking in sexual feelings.

After they finally got a divorce, she secured employment and gave up any hope of a normal life. After about two years, while living a very sheltered retiring life, she met by chance a man five years her senior who was successfully engaged in an

exciting, but to soberer minds, a somewhat questionable, promotional activity in real estate. His charm, his easily likeable personality, his knowledge of the world, his attentiveness and courtesy led her to make a third venture into matrimony.

They were married in the morning, and then went to an expensive suite in a hotel in a nearby town where he spent the day with her presenting innumerable plausible reasons in an effort to persuade her to turn over to him all of her property for him "to develop," thus to secure larger returns.

As he presented his arguments with increasing persuasiveness but with no display of emotional interest in her, a recollection of the beginnings of her first marriage raised sickening doubts in her mind. Her husband, becoming impatient with her slowness to accept his arguments, suddenly noted the horrified doubting expression on her face. Infuriated, he threw her on the bed and had violent intercourse with her while he denounced her for her lack of response, ridiculed her, told her how he had spent the previous night with a responsive prostitute and he finally walked out on her "to find someone who didn't have what my first husband said I had." A divorce was promptly secured by her.

Now she was interested in a young man who met the approval of her lawyer, her banker, her parents, her minister, and her friends. She desperately wanted to marry him, yet was equally desperate in her desire not to cause him any unhappiness. Her purpose in seeking psychiatric aid was to have her "deficiency corrected." With extreme embarrassment, in plain simple Anglo-Saxon so that there could be no possibility of any misunderstanding by the author, she made matters painfully clear. She wanted, no more no less, the chill she felt continuously, no matter what she wore, no matter how warm the seat she sat on, to be removed from her buttocks. This wretchedly cold feeling had been present, painfully present, since the first evening of her third marriage. The prompt dissolution of that marriage had not lessened the feeling of a subjectively recognizable coldness that had developed following the third husband's devastating criticism of her. This had plagued her continuously and she found herself to be too embarrassed to seek medical aid. Recently, in night school courses she was taking she had read about hypnosis, hypnotic phenomena, and hypnotherapy. Seeing the author's name given as a reference, she had come to Arizona for immediate, direct and specific therapy.

Her desire for therapy was almost irrational in its intensity. She was convinced of the circumscribed character of her problem and could not even listen to any attempted exposition of the general character of her difficulties. She was rigidly certain that once the "coldness" was removed, all would be well. She asserted an absolute willingness to cooperate in any way to achieve her goal of a slightly elevated temperature in place of the gluteal coldness. In the desperation of her desire for help it was not possible for her to see the humorous effect of her use of vulgar language to insure the author's exact understanding of her problem in terms of the exact words that had been used to describe it to her originally.

After a laborious three-hour effort to secure her interest in the author's views, it became apparent that therapy would have to be accomplished, if possible at all, in full accord with her persistent demands.

Much speculative thought was given to the content of her limited understandings to devise some kind of therapeutic approach. Since she wanted hypnosis desperately she became an easy somnambulistic subject, as is sometimes the case with this type of patient. Indeed, she was one of the most receptive and amenable subjects the author has encountered, and she agreed readily to accept and act upon any hypnotic

suggestion given her. The specious explanation given her was that, since she wanted her problem corrected by hypnosis, it was requisite that she be thoroughly trained in all hypnotic phenomena so that every possible necessary hypnotic element requisite for her cure would be experientially known to her. Actually, the real purpose was to develop in her a receptiveness, a responsiveness, a feeling of complete acceptance and a willingness to execute adequately any suggestion offered to her.

The next step was to ask her to make a systematic study by filling her bathtub with water of increasingly higher temperature until the water was hot enough to produce goose bumps on her legs which were the only part of her to be immersed in the bathtub. After much labor she succeeded in achieving this. She was then presented with a laboriously detailed explanation of how an overloading of the thermal receptors by excessive warmth would overflow into the cold receptors of the skin, thereby resulting in goose flesh. The success of this venture, in the author's opinion, played a large part in the successful therapy. It supplied her with indisputable visual proof that heat can produce the concomitants of coldness and that this could be done in a definitely limited area of the body. From that point on there existed for her no doubts or fears of the author's understanding or competence.

Therapy was then continued by inducing a deep trance and by carefully worded suggestions, making her feel privately, a feeling just to be enjoyed within herself, an exaggerated, utterly intense and inordinate pride in having the secret knowledge shared only with me that at least a part of her body could experience heat by a subjective cold response. Thus, by repetitious suggestion it was emphatically impressed upon her that this must always and forever be regarded as her own private pleasurable joy. The reason for this secrecy was to intensify her feeling and to preclude any disparagement by anyone in whom she might confide.

Then, bit by bit, suggestions were cautiously given her that, just as her calves had developed cold receptor responses to heat, so could the cold receptors of her thighs, of her buttocks, and her abdomen. Her acceptance of these ideas was insured by a sudden shift to a discussion of the "thrills and tingles of complete happiness and ecstatic joy that race so delightfully up and down the spine of the little girl who receives the new dolly so desperately wanted and never really expected."

This complex idea was impressed upon her with much repetition and with careful changes in the key words of "thrills" and "tingles" by making the phrase "thrills and chills and tingles" and then in a random fashion omitting one and then another of the three words. Also, since she came from a northern state and had a reasonably happy childhood, the "tingling delights of sledding down hill on a tinglingly cold day," the rapturous joys of a cold, cold dish of ice cream on a hot summer's day," and similar plays on words associated with pleasures safely remote in her history, were woven in a whole series of suggestions.

This was repeated for a number of sessions, always impressing upon her the need for an unconscious retention of the ideas, the need to incorporate them, and everything else she had been taught in therapy, into the warp and woof of her very existence and yet to keep the knowledge of all this safely secret forever from her conscious mind, just knowing in some vague and satisfying way that she possessed within her a knowledge and an understanding of a personal value, beauty and happiness.

Very rapidly there occurred a marked change in her general behavior. The tension, the urgency, the over-all anxiety disappeared, she went for long scenic drives, and she began speaking of visiting Phoenix again.

Then one day she entered the office hesitantly, diffidently, blushing deeply and keeping her eyes downcast. After about 15 minutes, almost in the voice of a small child she asked, "Can I tell you a secret, a very important secret that's all mine, my special secret that belongs all to me." The reply given her was, "I think that if you think it over very carefully you will find that you probably can tell your psychiatrist because he will understand."

After another seven minutes she said softly, "I've got to tell it in a special way that I know you will understand. It's what I said when I first came to you only it's all different now." Then, in completely vulgar terms, with many blushes, she stated in essence, "I like being a frozen posteriore creature.

To the author, that signified that she needed no further therapy and the years that have passed, her successful fourth marriage, her completion of college during the first years of this marriage and her subsequent entrance happily into the pleasures of motherhood have all confirmed the success of therapy.

And what was her problem? An impulsive marriage in the best of good faith, but a wretched mistaken marriage as she immediately discovered, a second mistaken marriage to correct the trauma of the first, promptly discovered to be another mistake that was slowly corrected only so far as the marital state was concerned, but with only an intensification of her traumas; a third desperate marriage entered in good faith to correct, if possible, the injuries of the past, with only resulting further injury. Then came the acute realization of her therapeutic needs when a genuinely good marriage presented itself.

And what was her therapy? An unhappy succession of events had progressively emphasized the trauma centering about a vital need in her life, her fulfillment as a woman. These events had degraded her in her own eyes and had led her unconsciously to summarize her total unhappiness in a circumscribed way. Then she sought circumscribed therapy, only circumscribed therapy. This was presented to her in such a fashion that, even as she had circumscribed everything, she was in a position to enlarge properly her whole problem. Her thinking about her problem had been repressed emotionally largely at an unconscious level. Her therapy permitted her to do the same type of thinking but to include in it not only the events leading to her problem but the emotional values dating all the way back to her childhood. Then when once she had achieved her goals, at the level of unconscious motivation she felt compelled to verbalize her original presenting complaint but with a totally different meaning and perspective. By doing this she freed herself from any dependency upon the therapist and then could go her way, finding her own proper goals in life.

CONCLUDING COMMENT

THESE THREE DIFFERENT CASE HISTORIES are presented to illustrate the importance in therapy of doing what appears to be most important to the patient, that which constitutes an expression of the distorted thoughts and emotions of the patient. The therapist's task should not be a proselytizing of the patient with his own beliefs and understandings. No patient can really understand the understandings of his therapist nor does he need them. What is needed is the development of a therapeutic situation permitting the patient to use his own thinking, his own understandings, his own emotions in the way that best fits him in his scheme of life.

Each of the patients reported on have no real understanding of what their therapist thinks, knows, believes, likes, or dislikes. They know primarily that in some peculiar way they began to unsnarl their lives in a fashion as unexplicable as was the fashion in which they had once snarled their thinking and their emotions.

The Interspersal Hypnotic Technique for Symptom Correction and Pain Control*

INNUMERABLE TIMES this author has been asked to commit to print in detail the hypnotic technique he had employed to alleviate intolerable pain or to correct various other problems. The verbal replies made to these many requests have never seemed to be adequate since they were invariably prefaced by the earnest assertion that the technique in itself serves no other purpose than that of securing and fixating the patient's attention, creating in him a receptive and responsive mental state, and thereby enabling him to benefit from unrealized or only partially realized potentials for behavior of various types. With this achieved by the hypnotic technique, there is then the opportunity to proffer suggestions and instructions serving to aid and to direct the patient in achieving the desired goal or goals. In other words, the hypnotic technique serves only to induce a favorable setting in which to instruct the patient in a more advantageous use of his own potentials of behavior.

Since the hypnotic technique is primarily a means to an end while therapy derives from the guidance of the patient's behavioral capacities, it follows that, within limits, the same hypnotic technique can be utilized for patients with widely diverse problems. To illustrate, two instances will be cited in which the same technique was employed, once for a patient with a distressing neurotic problem and once for a patient suffering from intolerable pain from terminal malignant disease. The technique is one that the author has employed on the illiterate subject and upon the college graduate, in experimental situations and for clinical purposes. Often it has been used to secure, to fixate, and to hold a difficult patient's attention and to distract him from creating difficulties that would impede therapy. It is a technique employing ideas that are clear, comprehensible, but which by their patent irrelevance to the patient-physician relationship and situation distract the patient. Thereby the patient is prevented from intruding unhelpfully into a situation which he cannot understand and for which he is seeking help. At the same time, a readiness to understand and to respond is created within the patient. Thus, a favorable setting is evolved for the elicitation of needful and helpful behavioral potentialities not previously used, or not fully used or perhaps misused by the patient.

The first instance to be cited will be given without any account of the hypnotic technique employed. Instead, there will be given the helpful instructions, suggestions, and guiding ideas which enabled the patient to achieve his therapeutic goal and which were interspersed among the ideas constituting the hypnotic technique. These therapeutic ideas will not be cited as repetitiously as they were verbalized to the patient for the reason that they are more easily comprehended in cold print than when uttered as a part of a stream of utterances. Yet, these few repeated suggestions in the hypnotic situation served to meet the patient's needs adequately.

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The patient was a 62-year-old retired farmer with only an eighth grade education, but decidedly intelligent and well-read. He actually possessed a delightful, charming out-going personality, but he was most unhappy, filled with resentment, bitterness, hostility, suspicion and despair. Approximately two years previously for some unknown or forgotten reason (regarded by the author as unimportant and as having no bearing upon the problem of therapy) he had developed a urinary frequency that was most distressing to him. Approximately every half hour he felt a compelling urge to urinate, an urge that was painful, that he could not control, and which would result in a wetting of his trousers if he did not yield to it. This urge was constantly present day and night. It interfered with his sleep, his eating, his social adjustments and compelled him to keep within close reach of a lavatory and to carry a briefcase containing several pairs of trousers for use when he was "caught short." He explained that he had brought into the office a briefcase containing three pairs of trousers and he stated that he had visited a lavatory before leaving for the author's office, another on the way and that he had visited the office lavatory before entering the office and that he expected to interrupt the interview with the author by at least one other such visit.

He related that he had consulted more than 100 physicians and well-known clinics. He had been cystoscoped more than 40 times, had had innumerable x-ray pictures taken and countless tests, some of which were electroencephalograms and electrocardiograms. Always he was assured that his bladder was normal; many times he was offered the suggestion to return after a month or two for further study; and "too many times" he was told that "it's all in your head;" that he had no problem at all, that he "should get busy doing something instead of being retired, and to stop pestering doctors and being an old crock." All of this had made him feel like committing suicide.

He had described his problem to a number of writers of syndicated medical columns in newspapers, several of whom offered him in his stamped self-addressed envelope a pontifical platitudinous dissertation upon his problem stressing it as one of obscure organic origin. In all of his searching, not once had it been suggested that he seek psychiatric aid.

On his own initiative, after reading two of the misleading, misinforming and essentially fraudulent books on "do-it-yourself hypnosis," he did seek the aid of stage hypnotists, in all, three in number. Each offered him the usual blandishments, reassurances, and promises common to that type of shady medical practice and each failed completely in repeated attempts at inducing an hypnotic tractive. Each charged an exorbitant fee (as judged by a standard medical fee, and especially in relation to the lack of benefit received).

As a result of all this mistreatment, the medical no better than that of the charlatans and actually less forgivable, he had become bitter, disillusioned, resentful and openly hostile, and he was seriously considering suicide. A gas station attendant suggested that he see a psychiatrist and recommended the author on the basis of a Sunday newspaper article. This accounted for his visit to the author.

Having completed his narrative, he leaned back in his chair, folded his arms and challengingly said, "Now psychiatrize and hypnotize me and cure this —— bladder of mine."

During the narration of the patient's story, the author had listened with every appearance of rapt attention except for a minor idling with his hands, thereby shifting the position of objects on his desk. This idling including a turning of the

face of the desk clock away from the patient. As he listened to the patient's bitter account of his experiences, the author was busy speculating upon possible therapeutic approaches to a patient so obviously unhappy, so resentful toward medical care and physicians, and so challenging in attitude. He certainly did not appear to be likely to be receptive and responsive to anything the author might do or say. As the author puzzled over this problem there came to mind the problem of pain control for a patient suffering greatly in a terminal state of malignant disease. That patient had constituted a comparable instance where a hypnotherapeutic approach had been most difficult, and yet, success had been achieved. Both patients had in common the experience of growing plants for a livelihood, both were hostile and resentful, and both were contemptuous of hypnosis. Hence, when the patient issued his challenge of "psychiatrize and hypnotize me," the author, with no further ado, launched into the same technique employed with that other patient to achieve a hypnotherapeutic state in which helpful suggestions, instructions, and directions could be offered with reasonable expectation that they would be accepted and acted upon responsively in accord with the patient's actual needs and behavioral potentials.

The only differences for the two patients was that the interwoven therapeutic material for the one patient pertained to bladder function and duration of time. For the other patient, the interwoven therapeutic instructions pertained to body comfort, to sleep, to appetite, to the enjoyment of the family, to an absence of any need for medication and to the continued enjoyment of time without concern about the morrow.

The actual verbal therapy offered, interspersed as it was in the ideation of the technique itself, was as follows, with the interspersing denoted by dots. "You know, we could think of your bladder needing emptying every 15 minutes instead of every half hour . . . Not difficult to think that . . . A watch can run slow . . . or fast . . . be wrong even a minute . . . even two, five minutes . . . or think of bladder every half hour . . . like you've been doing . . . maybe it was 35, 40 minutes sometimes . . . like to make it an hour . . . what's the difference . . . 35, 36 minutes, 41, 42, 45 minutes . . . not much difference . . . not important difference . . . 45, 46, 47 minutes . . . all the same . . . lots of times you maybe had to wait a second or two . . . felt like an hour or two . . . you made it . . . you can again . . . 47 minutes, 50 minutes, what's the difference . . . stop to think, no great difference, nothing important . . . just like 50 minutes, 60 minutes, just minutes . . . anybody that can wait half an hour call wait an hour . . . I know it . . . you are learning . . . not bad to learn . . . in fact, good . . . come to think of it, you have had to wait when somebody got there ahead of you . . . you made it too . . . can again . . . and again . . . all you want to . . . hour and 5 minutes . . . hour and 5½ minutes . . . what's the difference . . . or even 6½ minutes . . . make it 10½, hour and 10½ minutes . . . one minute, 2 minutes, one hour, 2 hours, what's the difference . . . you got half a century or better of practice in waiting behind you . . . you can use all that . . . why not use it . . . you can do it . . . probably surprise you a lot . . . won't even think of it . . . why not surprise yourself at home . . . good idea . . . nothing better than a surprise . . . an unexpected surprise . . . how long can you hold out . . . that's the surprise . . . longer than you even thought . . . lots longer . . . might as well begin . . . nice feeling to begin . . . to keep on . . . Say, why don't you just forget what

I've been talking about and just keep it in the back of your mind. Good place for it—can't lose it. Never mind the tomato plant—just what was important about your bladder,—pretty good, feel fine, nice surprise—say, why don't you start feeling rested, refreshed right now, wider awake than you were earlier this morning (this last statement is, to the patient, an indirect emphatic definitive instruction to arouse from his trance). Then, (as a dismissal but not recognizable as such consciously by the patient) why don't you take a nice leisurely walk home, thinking about nothing (an amnesia instruction for both the trance and his problem, and also a confusion measure to obscure the fact that he had already spent 1½ hours in the office)? I'll be able to see you at 10:00 a.m. a week from today (furthering his conscious illusion, resulting from his amnesia, that nothing yet had been done except to give him an appointment)."

A week later he appeared and launched into an excited account of arriving home and turning on the television with an immediate firm intention of delaying urination as long as possible. He watched a two-hour movie and drank two glasses of water during the commercials. He decided to extend the time another hour and suddenly discovered that he had so much bladder distension that he had to visit the lavatory. He looked at his watch and discovered that he had waited four hours. The patient leaned back in his chair, beaming happily at the author, obviously expecting praise. Almost immediately he leaned forward with a startled look and declared in amazement, "It all comes back to me now. I never give it a thought till just now. I plumb forgot the whole thing. Say, you must have hypnotized me. You were doing a lot of talking about growing a tomato plant and I was trying to get the point of it and the next thing I knew I was walking home. Come to think of it I must of been in your office over an hour and it took an hour to walk home. It wasn't no four hours I held back, it was over six hours at least. Come to think of it, that ain't all. That was a week ago that happened. Now I recollect I ain't had a bit of trouble all week—slept fine—no getting up. Funny how a man can get up in the morning, his mind all set on keeping an appointment to tell something, and forget a whole week has went by. Say, when I told you to psychiatrize and hypnotize me, you sure took it serious. I'm right grateful to you. How much do I owe you?"

Essentially, the case was completed and the remainder of the hour was spent in social small talk with a view of detecting any possible doubts or uncertainties in the patient. There were none, nor, in the months that have passed, have there occurred any.

The above case report allows the reader to understand in part how, during a technique of suggestions for trance induction and trance maintenance, hypnotherapeutic suggestions can be interspersed for a specific goal. In the author's experience, such an interspersing of therapeutic suggestions among the suggestions for trance maintenance may often render the therapeutic suggestions much more effective. The patient hears them, understands them, but before he can take issue with them or question them in any way, his attention is captured by the trance maintenance suggestions. And these in turn are but a continuance of the trance induction suggestions. Thus, there is given to the therapeutic suggestion an aura of significance and effectiveness deriving from the already effective induction and maintenance suggestions. Then again the same therapeutic suggestions can be repeated in this interspersed fashion, perhaps repeated many times, until the therapist feels confident that the patient has absorbed the therapeutic suggestions ade-

quately. Then the therapist can progress to another aspect of therapy using the same interspersal technique.

The above report does not indicate the number of repetitions for each of the therapeutic suggestions for the reason that the number must vary with each set of ideas and understandings conveyed and with each patient and each therapeutic problem. Additionally such interspersal of suggestions for amnesia and posthypnotic suggestions among the suggestions for trance maintenance can be done most effectively. To illustrate from everyday life: A double task assignment is usually more effective than the separate assignment of the same two tasks. For example, a mother may say, "Johnny, as you put away your bicycle just step over and close the garage door." This has the sound of a single task, one aspect of which favors the execution of another aspect, and thus there is the effect of making the task seem easier. To ask that the bicycle be put away and then to ask that the garage door be closed has every sound of being two separate, not to be combined, tasks. To the separate tasks, a refusal can be given easily to one or the other task or to both. But a refusal when the tasks are combined into a single task means what? That he will not put away the bicycle? That he will not step over to the garage? That he will not close the garage door?

The very extent of the effort needed to identify what one is refusing in itself is a deterrent to refusal. Nor can a refusal of the "whole thing" be offered comfortably. Hence Johnny may perform the combined task unwillingly but may prefer to do so rather than to analyze the situation. To the single tasks he can easily say "later" to each. But to the combined task, he cannot say, "Later" since, if he puts away the bicycle "later," he must "immediately" step over to the garage and "immediately" close the door. This is specious reasoning, but it is the "emotional reasoning" that is common in daily life, and daily living is not an exercise in logic. As a common practice the author says to a patient, "As you sit down on the chair, just go into a trance." The patient is surely going to sit down in the chair. But going into a trance is made contingent upon sitting down, hence, a trance state develops from what the patient was most certainly going to do. By combining psychotherapeutic, amnestic and posthypnotic suggestions with those suggestions used first to induce a trance and then to maintain that trance constitutes an effective measure in securing desired results. Contingency values are decidedly effective. As a further illustration, more than once a patient who has developed a trance upon simply sitting down has said to the author, "I didn't intend to go into a trance today." In reply the author has stated, "Then perhaps you would like to awaken from the trance and hence, *as you understand that* you can go back into a trance *when you need to, you will awaken*. Thus the "awakening" is made contingent upon "understanding," thereby insuring further trances through association by contingency.

With this explanation of rationale, the problem of the second patient will be presented after a few preliminary statements. These are that the author was reared on a farm, enjoyed and still enjoys growing plants, and has read with interest about the processes of seed germination and plant growth. The first patient was a retired farmer. The second, who will be called "Joe" for convenience, was a florist. He began his career as a boy by peddling flowers, saving his pennies, buying more flowers to peddle, etc. Soon he was able to buy a small parcel of land on which to grow more flowers with loving care while he enjoyed their beauty which he wanted to share with others, and in turn, to get more land and to grow more

flowers, etc. Eventually he became the leading florist in a large city. Joe literally loved every aspect of his business, was intensely devoted to it but he was also a good husband, a good father, a good friend and a highly respected and valued member of the community.

Then one fateful September a surgeon removed a growth from the side of Joe's face, being careful not to disfigure Joe's face too much. The pathologist reported the growth to be a malignancy. Radical therapy was then instituted but it was promptly recognized as "too late."

Joe was informed that he had about a month left to live. Joe's reaction was, to say the least, unhappy and distressed. In addition he was experiencing much pain, in fact, extremely severe pain.

At the end of the second week in October, a relative of Joe's urgently requested the author to employ hypnosis on Joe for pain relief since narcotics were proving of little value. In view of the prognosis that had been given for Joe, the author agreed reluctantly to see him, stipulating that all medication be discontinued at 4:00 a.m. of the day of the author's arrival. To this the physicians in charge of Joe at the hospital courteously agreed.

Shortly before the author was introduced to Joe, he was informed that Joe disliked even the mention of the word hypnosis. Also, one of Joe's children, a resident in psychiatry at a well-known clinic, did not believe in hypnosis and had apparently been confirmed in this disbelief by the psychiatric staff of the clinic, none of whom is known to have had any first hand knowledge of hypnosis. This resident would be present and the inference was that Joe knew of that disbelief.

The author was introduced to Joe who acknowledged the introduction in a most courteous and friendly fashion. It is doubtful if Joe really knew why the author was there. Upon inspecting Joe, it was noted that much of the side of his face and neck was missing because of surgery, ulceration, maceration and necrosis. A tracheotomy had been performed on Joe and he could not talk. He communicated by pencil and paper, many pads of which were ready at hand. The information was given that every 4 hours Joe had been receiving narcotics ($\frac{1}{4}$ grain of morphine or 100 milligrams of Demerol) and heavy sedation with barbiturates. He slept little. Special nurses were constantly at hand. Yet Joe was constantly hopping out of bed, writing innumerable notes, some pertaining to his business, some to his family, but many of them were expressive of complaints and demands for additional help. Severe pain distressed him continuously and he could not understand why the doctors could not handle their business as efficiently and as competently as he did his floral business. His situation enraged him because it constituted failure in his eyes. Success worked for and fully merited had always been a governing principle in his life. When things went wrong with his business, he made certain to correct them. Why did not the doctors do the same? The doctors had medicine for pain so why was he allowed to suffer such intolerable pain?

After the introduction, Joe wrote, "What you want?" This constituted an excellent opening and the author began his technique of trance induction and pain relief. This will not be given in its entirety since a large percentage of the statements made were repeated, not necessarily in succession but frequently by referring back to a previous remark and then repeating a paragraph or two. Another preliminary statement needed is that the author was most dubious about achieving any kind of success with Joe since, in addition to his physical condition, there were definite

evidences of toxic reactions to excessive medication. Despite the author's unfavorable view of possibilities, there was one thing of which he could be confident. He could keep his doubts to himself and he could let Joe know by manner, tone of voice, by everything said that the author was genuinely interested in him, was genuinely desirous of helping him. If even that little could be communicated to Joe, it should be of some comfort, however small, to Joe and to the family members and to the nurses within listening distance in the side room.

The author began: "Joe, I would like to talk to you. I know you are a florist, that you grow flowers, and I grew up on a farm in Wisconsin and I liked growing flowers. I still do. So I would like to have you take a seat in that easy chair as I talk to you. I'm going to say a lot of things to you but it won't be about flowers because you know more than I do about flowers. *That isn't what you want.* (The reader will note that italics will be used to denote interspersed hypnotic suggestions which may be syllables, words, phrases or sentences uttered with a slightly different intonation.) Now as I talk and I can do so *comfortably*, I wish that you will *listen to me comfortably* as I talk about a tomato plant. That is an odd thing to talk about. It makes one *curious*. *Why talk about a tomato plant?* One puts a tomato seed in the ground. One can *feel hope* that it will grow into a tomato plant that *will bring satisfaction* by the fruit it has. The seed soaks up water, *not very much difficulty* in doing that because of the rains that *bring peace and comfort* and the joy of growing to flowers and tomatoes. That little seed, Joe, slowly swells, sends out a little rootlet with cilia on it. Now you may not know what cilia are, but cilia are *things that work* to help the tomato seed grow, to push up above the ground as a sprouting plant, and *you can listen to me Joe* so I will keep on talking and *you can keep on listening, wondering, just wondering what you can really learn*, and here is your pencil and your pad but speaking of the tomato plant, it grows so slowly. *You cannot see it grow, you cannot hear it grow, but grow it does*—the first little leaflike things on the stalk, the fine little hairs on the stem, those hairs are on the leaves too like the cilia on the roots, they must make the tomato plant *feel very good, very comfortable* if you can think of a plant as feeling and then, *you can't see it growing, you can't feel it growing* but another leaf appears on that little tomato stalk and then another. Maybe, and this is talking like a child, maybe the tomato plant does *feel comfortable and peaceful* as it grows. Each day it grows and grows and grows, *it's so comfortable Joe* to watch a plant grow and *not see its growth not feel it* but just know that *all is getting better* for that little tomato plant that is adding yet another leaf and still another and a branch and it is *growing comfortably* in all directions. (Much of the above by this time had been repeated many times; sometimes just phrases, sometime sentences. Care was taken to vary the wording and also to repeat the hypnotic suggestions. Quite some time after the author had begun, Joe's wife came tiptoeing into the room carrying a sheet of paper on which was written the question, "When are you going to start the hypnosis?" The author failed to cooperate with her by looking at the paper and it was necessary for her to thrust the sheet of paper in front of the author and therefore in front of Joe. The author was continuing his description of the tomato plant uninterrupted and Joe's wife, as she looked at Joe, saw that he was not seeing her, did not know that she was there, that he was in a somnambulistic trance. She withdrew at once.) And soon the tomato plant will have a bud form somewhere, on one branch or another, but it makes no difference because all the branches, the whole tomato plant will soon

have those nice little buds—I wonder if the tomato plant can, *Joe, feel really feel a kind of comfort.* You know, Joe, a plant is a wonderful thing, and *it is so nice, so pleasing* just to be able to think about a plant as if it were a man. Would such a plant *have nice feelings, a sense of comfort* as the tiny little tomatoes begin to form, so tiny, yet so *full of promise to give you the desire to eat* a luscious tomato, sunripened, it's so *nice to have food in one's stomach*, that wonderful feeling a child, a thirsty child, has and can *want a drink, Joe* is that the way the tomato plant feels when the rain falls and washes everything so that *all feels well* (pause) *You know, Joe*, a tomato plant just flourishes each day *just a day at a time*. I like to think the tomato plant can *know the fullness of comfort each day. You know, Joe, just one day at a time* for the tomato plant. That's the way for all tomato plants. (Joe suddenly came out of the trance, appeared disoriented, hopped upon the bed, waved his arms and his behavior was highly suggestive of the sudden surges of toxicity one sees in patients who have reacted unfavorably to barbiturates. Joe did not seem to hear or see the author until he hopped off the bed and had walked toward the author. A firm grip was taken on Joe's arm and then immediately loosened. The nurse was summoned. She mopped perspiration from his forehead, changed his surgical dressings, and gave him, by tube, some ice water. Joe then let the author lead him back to his chair. After a pretense by the author of being curious about Joe's forearm, Joe seized his pencil and paper and wrote, "Talk, talk.") "Oh yes, Joe, I grew up on a farm, I think a tomato seed is a wonderful thing, *think, Joe, think* in that little seed there does *sleep so restfully, so comfortably* a beautiful plant yet to be grown that will bear such interesting leaves and branches. The leaves, the branches look so beautiful, that beautiful rich color, *you can really feel happy* looking at a tomato seed, thinking about the wonderful plant it contains *asleep, resting, comfortable, Joe*. I'm soon going to leave for lunch and I'll be back and I will talk some more."

The above is a summary to indicate the ease with which hypnotherapeutic suggestions can be included in the trance induction and trance maintenance suggestions which are important additionally as a vehicle for the transmission of therapy. Of particular significance is Joe's own request that the author "talk." Despite his toxic state, spasmodically evident, Joe was definitely accessible. Moreover he learned rapidly despite the absurdly amateurish rhapsody the author offered about a tomato seed and plant. Joe had no real interest in pointless endless remarks about a tomato plant. Joe wanted freedom from pain, he wanted comfort, rest, sleep. This was what was uppermost in Joe's mind, foremost in his emotional desires, and he would have a compelling need to try to find something of value to him in the author's babbling. That desired value was there, so spoken that Joe could literally receive it without realizing it. Joe's arousal from the trance was only ~~some~~ minutes after the author had said so seemingly innocuously, "want a drink, Joe." Nor was the re-induction of the trance difficult, achieved by two brief phrases, "think Joe think" and "sleep so restfully, so comfortably" imbedded in a rather meaningless sequence of ideas. But what Joe wanted and needed was in that otherwise meaningless narration, and he promptly accepted it.

During the lunch time, Joe was first restful and then slowly restless, another toxic episode occurred, as reported by the nurse. By the time the author returned Joe was waiting impatiently for him. Joe wanted to communicate by writing notes. Some were illegible because of his extreme impatience in writing. He would irri-

tatedly rewrite them. A relative helped the author to read these notes. They concerned things about Joe, his past history, his business, his family and "last week terrible," "yesterday was terrible." There were no complaints, no demands, but there were some requests for information about the author. After a fashion a satisfying conversation was had with him as was judged by an increasing loss of his restlessness. When it was suggested that he cease walking around and sit in the chair used earlier, he did so readily and looked expectantly at the author.

"You know, Joe, I could talk to you some more about the tomato plant and if I did you would probably go to sleep, in fact, a good sound sleep. (This opening statement has every earmark of being no more than a casual commonplace utterance. If the patient responds hypnotically, as Joe promptly did, all is well. If the patient does not respond, all you have said was just a commonplace remark, not at all noteworthy. Had Joe not gone into a trance immediately, there could have been a variation such as: "But instead, let's talk about the tomato flower. You have seen movies of flowers *slowly, slowly* opening, giving one *a sense of peace, a sense of comfort* as you watch the unfolding. So beautiful, *so restful* to watch. One can *feel such infinite comfort* watching such a movie.")

It does not seem to the author that more needs to be said about the technique of trance induction and maintenance and the interspersal of therapeutic suggestions. Another illustration will be given later in this paper.

Joe's response that afternoon was excellent despite several intervening episodes of toxic behavior and several periods where the author deliberately interrupted his work to judge more adequately the degree and amount of Joe's learning.

Upon departure that evening, the author was cordially shaken by hand by Joe, whose toxic state was much lessened. Joe had no complaints, he did not seem to have distressing pain, and he seemed to be pleased and happy.

Relatives were concerned about post-hypnotic suggestions but they were reassured that such had been given. This had been done most gently in describing so much in detail and repetition the growth of the tomato plant and then, with careful emphasis, "*You know Joe,*" "*Know the fullness of comfort each day,*" and "*You know, Joe, just one day at a time.*"

About a month later around the middle of November, the author was requested to see Joe again. Upon arriving at Joe's home, he was told a rather regrettable but not actually unhappy story. Joe had continued his excellent response after the author's departure on that first occasion, but hospital gossip had spread the story of Joe's hypnosis and interns, residents, and staff men came in to take advantage of Joe's capacity to be a good subject. They made all the efforts possible for uninformed amateurs with superstitious misconceptions of hypnosis. Their behavior infuriated Joe who knew that the author had done none of the offensive things they were doing. This was a fortunate realization since it permitted Joe to keep all the benefits acquired from the author without letting his hostilities toward hypnosis interfere. After several days of annoyance, Joe left the hospital and went home, keeping one nurse in constant attendance, but her duties were relatively few.

During that month at home he had actually gained weight and strength. Rarely did a surge of pain occur and when it did it could be controlled either with aspirin or with 25 milligrams of Demerol. Joe was very happy to be with his family and there was considerable fruitful activity about which the author is not fully informed.

Joe's greeting to the author on the second visit was one of obvious pleasure.

However, the author noted that Joe was keeping a wary eye on him, hence, great care was taken to be completely casual and to avoid any hand movement that could be remotely misconstrued as an "hypnotic pass" such as the hospital staff had employed.

Framed pictures painted by a highly talented member of his family were proudly displayed. There was much casual conversation about Joe's improvement and his weight gain and the author was repeatedly hard pushed to find simple replies to conceal pertinent suggestions. Joe did volunteer to sit down and let the author talk to him. Although the author was wholly casual in manner, the situation was thought to be most difficult to handle without arousing Joe's suspicions. Perhaps this was an unfounded concern but the author wished to be most careful. Finally the measure was employed of reminiscing about "our visit last October." Joe did not realize how easily this visit could be pleasantly vivified for him by such a simple statement as, "I talked about a tomato plant then and it almost seems as if I could be *talking about a tomato plant right now. It is so enjoyable to talk about a seed, a plant.*" Thus there was, clinically speaking, a re-creation of all of the favorable aspects of that original interview.

Joe was most insistent on supervising the author's luncheon that day, which was a steak barbecued under Joe's watchful eye in the back yard beside the swimming pool. It was a happy gathering of four people thoroughly enjoying being together, Joe being obviously most happy.

After luncheon, Joe proudly displayed the innumerable plants, many of them rare, that he had personally planted in the large back yard. Joe's wife furnished the Latin and common names for the plants and Joe was particularly pleased when the author recognized and commented on some rare plant. Nor was this a pretense of interest, since the author is still interested in growing plants. Joe regarded this interest in common to be a bond of friendship.

During the afternoon, Joe sat down voluntarily, his very manner making evident that the author was free to do whatever he wished. A long monologue by the author ensued in which were included psychotherapeutic suggestions of continued ease, comfort, freedom from pain, enjoyment of family, good appetite, and a continuing pleased interest in all surroundings. All of these and other similar suggestions were interspersed unnoticeably among the author's many remarks. These covered a multitude of topics to preclude Joe from analyzing or recognizing the interspersing of suggestions. Also, for adequate disguise, the author needed a variety of topics. Whether or not such care was needed in view of the good rapport is a debatable question, but the author preferred to take no risks.

Medically, the malignancy was continuing to progress, but despite this fact, Joe was in much better physical condition than he had been a month previously. When the author took his departure, Joe invited him to return again.

Joe knew that the author was going on a lecture trip in late November and early December. Quite unexpected by the author, a long distance telephone call was received just before the author's departure on this trip. The call was from Joe's wife who stated, "Joe is on the extension line and wants to say 'hello' to you, so listen." Two brief puffs of air were heard. Joe had held the telephone mouthpiece over his tracheotomy tube and had exhaled forcibly twice to simulate "hello." His wife stated that both she and Joe extended their best wishes for the trip and a casual conversation of friends ensued with Joe's wife reading Joe's written notes.

A Christmas greeting card was received from Joe and his family. In a separate letter Joe's wife said that "the hypnosis is doing well, but Joe's condition is failing." Early in January Joe was weak but comfortable. Finally, in his wife's words, "Joe died quietly January 21."

The author is well aware that the prediction of the duration of life for any patient suffering from a fatal illness is most questionable. Joe's physical condition in October did not promise very much. The symptom amelioration, abatement and actual abolishment effected by hypnosis, and the freedom of Joe's body from potent medications, conducive only of unawareness, unquestionably increased his span of life while at the same time permitting an actual brief physical betterment in general. This was attested clearly by his improved condition at home and his gain in weight. That Joe lived until the latter part of January despite the extensiveness of his malignant disease undoubtedly attests to the vigor with which Joe undertook to live the remainder of his life as enjoyably as possible, a vigor expressive of the manner in which he had lived his life and built his business.

To clarify still further this matter of the technique of the interspersal of therapeutic suggestions among trance induction and trance maintenance suggestions, it might be well to report the author's original experimental work done while he was on the Research Service of the Worcester State Hospital in Worcester, Massachusetts in the early 1930's.

The Research Service was concerned with the study of the numerous problems of schizophrenia and the possibilities of solving some of them. To the author, the psychological manifestations were of paramount interest. For example, just what did a stream of disconnected rapidly uttered incoherencies mean? Certainly, in some manner, such a stream of utterances must be most meaningful to the patient in some way. Competent secretaries from time to time had recorded verbatim various examples of such disturbed utterances for the author's perusal and study. The author himself managed to record adequately similar such productions by patients who spoke slowly. Careful study of these verbal productions, it was thought, might lead to various speculative ideas that, in turn, might prove of value in understanding something about schizophrenia.

The question arose of whether or not much of the verbigeration might be a disguise for concealed meanings, fragmented and dispersed among the total utterances. This led to the question of how could the author himself produce a series of incoherencies in which he could conceal in a fragmented form a meaningful message. Or could he use the incoherencies of a patient and intersperse among them in a somewhat orderly fashion a fragmented meaningful communication that would be difficult to recognize? This speculation gave rise to many hours of intense labor spent fitting into a patient's verbatim, apparently meaningless, utterances a meaningful message that could not be detected by the author's colleagues when no clue of any sort was given to them. Previous efforts at producing original incoherencies by the author disclosed a definite and recognizable personal pattern indicating that the author was not sufficiently disturbed mentally to produce a bona fide stream of incoherent verbigerations.

When a meaning was interspersed in a patient's products successfully, the author discovered that his past hypnotic experimentation with hypnotic techniques greatly influenced the kind of a message which he was likely to intersperse in a patient's verbigerations. Out of this labor came the following experimental and therapeutic work.

One of the more recently hired secretaries objected strongly to being hypnotized. She suffered regularly upon the onset of menstruation from severe migrainous headaches lasting 3 to 4 or even more hours. She had been examined repeatedly by the medical service with no helpful findings. She usually retired to the lounge and "slept off the headache," a process usually taking 3 or more hours. On one such occasion, she had been purposely rather insistently forced to take dictation by the author instead of being allowed to retire to the lounge. Rather resentfully she began her task but within 15 minutes she interrupted the author to explain that her headache was gone. She attributed this to her anger at being forced to take dictation. Later, on another such occasion, she volunteered to take certain dictation which all of the secretaries tried to avoid because of the difficulties it presented. Her headache grew worse and she decided that the happy instance with the author was merely a fortuitous happenstance. Subsequently she had another severe headache. She was again insistently requested by the author to take some dictation. The previous happy result occurred within ten minutes. Upon the occurrence of another headache, she volunteered to take dictation from the author. Again it served to relieve her headache. She then experimentally tested the benefits of dictation from other physicians. For some unknown reason, her headaches only worsened. She returned from one of these useless attempts to the author and asked him to dictate. She was told he had nothing on hand to dictate but that he could redictate previously dictated material. Her headache was relieved within 8 minutes. Later her request for dictation for headache relief was met by some routine dictation. It failed to have any effect.

She came again, not too hopefully since she thought she had "worn-out the dictation remedy." Again she was given dictation with a relief of her distress in about 9 minutes. She was so elated that she kept a copy of the transcript so that she could ask others to dictate "that successful dictation" to relieve her headaches. Unfortunately, nobody seemed to have the "right voice" as did the author. Always, a posthypnotic suggestion was casually given that there would be no falling asleep while transcribing.

She did not suspect, nor did anybody else, what had really been done. The author had made comprehensive notes of the incoherent verbigeration of a psychotic patient. He had also had various secretaries make verbatim records of patient's incoherent utterances. He had then systematically interspersed therapeutic suggestions among the incoherencies with that secretary in mind. When this was found to be successful, the incoherent utterances of another patient were utilized in a similar fashion. This was also a successful effort. As a control measure, routine dictation and the dictation of "undoctored incoherencies" were tried. These had no effect upon her headaches. Nor did the use by others of "doctored" material have an effect since it had to be read aloud with some degree of expressive awareness to be effective.

The question now arises, why did these two patients and those patients used experimentally respond therapeutically? This answer can be given simply as follows: They knew very well why they were seeking therapy; they were desirous of benefitting; they came in a receptive state ready to respond at the first opportunity, except for the first experimental patient. But she was eager to be freed from her headache, and wished the time being spent taking dictation could be time spent getting over her headache. Essentially, then, all of the patients were in a frame of mind to receive therapy. How many times does a patient need to state his com-

plaint? Only that number of times requisite for the therapist to understand. For all of these patients, only one statement of the complaint was necessary and they then knew that the therapist understood. Their intense desire for therapy was not only a conscious but an unconscious desire also, as judged clinically, but more importantly, as evidenced by the results obtained.

One should also give recognition to the readiness with which one's unconscious mind picks up clues and information. For example, one may dislike someone at first sight and not become consciously aware of the obvious and apparent reasons for such dislike for weeks, months, even a year or more. Yet finally the reasons for the dislike become apparent to the conscious mind. A common example is the ready hostility frequently shown by a normal heterosexual person toward a homosexual person without any conscious realization of why.

Respectful awareness of the capacity of the patient's unconscious mind to perceive meaningfulness of the therapist's own unconscious behavior is a governing principle in psychotherapy. There should also be a ready and full respect for the patient's unconscious mind to perceive fully the intentionally obscured meaningful therapeutic instructions offered them. The clinical and experimental material cited above is based upon the author's awareness that the patient's unconscious mind is listening and understanding much better than is possible for his conscious mind.

It was intended to publish this experimental work, of which only the author was aware. But sober thought and awareness of the insecure status of hypnosis in general, coupled with that secretary's strong objection to being hypnotized—she did not mind losing her headaches by "taking dictation" from the author—all suggested the inadvisability of publication.

A second secretary, employed by the hospital when this experimental work was nearing completion, always suffered from disabling dysmenorrhea. The "headache secretary" suggested to this girl that she take dictation from the author as a possible relief measure. Most willingly the author obliged, using "doctored" patient verbigeration. It was effective.

Concerned about what might happen to hypnotic research if his superiors were to learn of what was taking place, the author carefully failed with this second secretary and then again succeeded. She volunteered to be an hypnotic subject and hypnosis, not "dictation" was then used to meet her personal needs. She also served repeatedly as a subject for various frankly acknowledged and "approved" hypnotic experiments and the author kept his counsel in certain other experimental studies.

Now that hypnosis has come to be an acceptable scientific modality of investigative and therapeutic endeavor and there has developed a much greater awareness of semantics, this material, so long relegated to the shelf of unpublished work, can safely be published.

SUMMARY

TWO CASE HISTORIES and a brief account of experimental work are presented in detail to demonstrate the effective procedure of interspersing psychotherapeutic suggestions among those employed to induce and to maintain an hypnotic trance. The patients treated suffered respectively from neurotic manifestations and the pain of terminal malignant disease.

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Commentary on the Writings of Milton H. Erickson, M.D.

BY

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In every profession, there is an occasional man who can be called an "original" because he works within a profession while deviating markedly from the ways of most of his colleagues. Sometimes such a man persuades the profession to follow him, and at other times he remains an outsider and does not make a ripple in the stream. Sigmund Freud took a unique direction and offered both a set of powerful ideas and an organization to foster and perpetuate a following. Harry Stack Sullivan did not organize, but the force of his new ideas and his personal influence as a teacher impressed his views upon the profession. As an innovator in psychiatry, Milton H. Erickson can be classed with Freud and Sullivan. Whether he will have as great an influence on the field is yet to be determined.

Like Freud, Erickson's major ideas came out of the field of hypnosis. Unlike Freud, he has stayed within the hypnotic tradition and reached quite different conclusions about the nature of psychopathology and therapeutic change. Like Sullivan, Erickson has placed greater emphasis upon the relationship than upon the individual. Unlike both Freud and Sullivan, Erickson's primary interest has been the exploration of diverse techniques for producing therapeutic change. What is most original about him, and what makes his approach not a simple school or method, is his flexibility; he is willing to orient his therapeutic approach to the particular problem before him. In a period of psychiatric history where a man was judged by whether or not he followed the proper theory and method, Erickson originated experimental therapy.

In the first half of this century, during the period of Erickson's development, there was a trend toward defense against innovation in the psychiatric profession. As psychoanalysis gained prestige in the consulting room and the university, there was a shift from the original exploratory approach of Freud to a ritualized treatment method and the repetition of stereotyped ideas. In this process, a peculiar change in emphasis took place in psychiatry. Complex human dilemmas were forced into a narrow theoretical scheme, and therapy began to be judged by whether the proper procedures were followed and not by whether results were obtained. It was in this climate that Erickson developed a wide variety of therapeutic techniques and tenaciously pursued the idea that the type of treatment should vary with the nature of the patient's problem. In the last decade, the idea of exploring new methods has been adopted by many psychiatrists and has led to such innovations as behavior therapy, conditioning treatment, and marital and family therapy. We have seen the passing of an emphasis upon ritual and a move toward judging therapeutic procedures by results instead of conformity to a particular school. It has even become respectable now to work in different ways with different types of patients.

Examining his writings, one can see that Erickson has carried the idea of experimentation throughout his professional work. It is as if he said to himself, "If I do this, what will that person do, and would another person respond differently?" In that sense, he has devoted his life to exploring the nature of one person's influence over another. With experimental investigations of hypnosis, he tested the limits of interpersonal influence over a person's sensory apparatus and behavior. He examined such questions as whether he could influence a person to be unable to hear, unable to see, unable to see colors, unable to experience physical sensations, unable to resist anti-social influences, and unable to be aware of the thought processes behind his behavior. Conversely, he examined how much could be achieved in the increase of sensation and perception. He explored the limits of unconscious mentation as well as the possible changes in a person's subjective perception of time and space.

The series of research papers reporting these experimental investigations represent some of the most solid work ever done in the field. Replication of many of the studies would require an investigator approaching subjects with the same care. Erickson routinely spent several hours inducing a trance before an experiment was attempted, and he took into account the individual idiosyncracies of each subject as well as an extraordinary number of other variables which might influence the experimental outcome. He assumed that the possibility of experimenter bias was part of the peril of such investigations and his precautions to insure that a subject's response was genuine and not simulated were elaborate. Perhaps most important, he recognized the laboratory setting as a variable which can set limits upon the nature and validity of findings and was willing to conduct some of his investigations in the social arena. When today many hypnotic experiments are done with brief, standardized inductions in an atmosphere of spurious objectivity, Erickson's work in contrast appears an art as well as a science.

In the field of psychotherapy, Erickson has applied an experimental approach to both the investigation of psychiatric problems and to ways of resolving them. When it was assumed that the words and behavior of a patient were a product of certain types of unconscious mentation, he tested this notion by "programming" specific ideas into a subject and then he observed the outcome behavior. As reported in "Experimental Demonstrations of the Psychopathology of Everyday Life," he provided experimental subjects with ideas and emotions, rendered these amnesic, and observed the overt behavior which followed. This work included the implantation of "complexes" in the form of false memories of past traumas to determine their effects on behavior. One of the better analyses of human communication extant is in his paper "The Method Employed to Formulate a Complex Story for the Induction of an Experimental Neurosis." Erickson's detailed analysis of why he used each word in the story of the past incident shows an extraordinary awareness of the intricacies of interpersonal involvement. His concern with the most subtle details of behavior is evident throughout his papers, particularly in such reports as "The Permanent Relief of an Obsessional Phobia Through Communication with an Unsuspected Dual Personality" (written with L. S. Kubie).

Whether doing research or therapy, the procedures used by Erickson will vary with the needs of a particular person, a situation, a time and his own needs. His therapeutic approach is characterized by the view that human problems are infinitely diverse while his therapeutic stance appears infinitely flexible. Yet there

is a consistency in the ways he deals with patients which gives his treatment a recognizable style.

Part of the problem when examining Erickson's therapeutic technique is the fact that there is no adequate theoretical framework available for describing it. His operations are based upon a new set of premises about the nature of psychopathology and therapeutic change, and these premises have not been systematically stated. Writing about his cases, Erickson tends to describe them within a theoretical framework of hypnosis, or of conditioning, or of psychodynamic theory. When one examines what he actually does with a patient, these traditional views do not seem appropriate. Out of a study of his work can come a new perspective in the field of therapy, but only if one is willing to examine what he does with a fresh view. From the traditional way of thinking, what Erickson does is often not reasonable; from the view of his approach, what is usually done in traditional therapy is often not reasonable.

When Erickson describes a case, he presents what the patient did and what he did, forcing us to examine the behavior of both participants in the interchange. It is this artifact of his case presentations which makes him appear more manipulative than other therapists, as well as his willingness to concede that therapy is an art of manipulation. Yet when one speaks privately to therapists of any school and asks them to describe what they actually did with a patient, they too appear manipulative. One learns that many of the kinds of operations done by Erickson are done by good therapists. Some psychiatrists wouldn't require a married couple who both wet the bed to conjointly wet the bed, as reported in "Indirect Hypnotic Therapy of an Enuretic Couple," but skilled therapists will actively intervene into patients' lives and require different types of behavior from them. However, in their case reports such therapists often will not mention these activities but will describe what should have been done according to the theory of a particular school rather than what was actually done.

The information about what Erickson does in therapy is of several kinds; his papers which include case reports and discussion, his demonstrations of how he works with a patient before a group, and his lectures and conversations about therapy. Many of his lectures, demonstrations and conversations have been tape-recorded; Erickson is probably the most recorded therapist in history and plans for a depository of such recordings are being made. The best information on the way Erickson works is in his case descriptions. However, many of his therapeutic procedures have not yet been written up and one can learn about them only from conversations with him. One also learns that although the "facts" of a particular case remain the same in his written and conversational reports, there are always more aspects of the case which are not mentioned in any particular context. He tends to emphasize those aspects most pertinent to the person with whom he is conversing. The reader of his case reports must keep in mind that Erickson is attempting to communicate with an audience trained in more traditional views and he tends to adapt what he says to that audience.

I will attempt some generalizations about the practical and theoretical aspects of Erickson's operations with information drawn from his published writings and from many hours of recorded conversations with him.¹ The view of his work offered here might or might not agree with Erickson's own views. His description of his work is available in his papers and what is said here is an adjunct to, and a commentary on, those writings. The reader can examine his papers and perhaps

conceive of his work in a different way. Some of the more practical aspects of his therapy can be described first.

Most therapists, and therapeutic approaches, tend to be restricted to a type of patient, but Erickson's cases cover the full range of human problems. He has eased the strains of birth at the beginning of the human career and he has helped ease the human being gracefully out of this world by treating terminal cancer patients (as in "Hypnosis in Painful Terminal Illness"). His case studies include all of life's stages; child problems, adolescent difficulties, marital problems and the dilemmas of middle age and retirement. Not only has he worked with the neurotic as well as the psychotic, but he has been willing to treat the less clearly psychiatric problems of the brain damaged and physically handicapped (as in "Hypnotically Oriented Psychotherapy in Organic Disease.")

For Erickson, the possible unit of treatment is not only the individual; it will also be the marital couple or the total family group. He might work with a symptom as an individual problem or as a product of a type of marriage. When focusing upon the married couple, he likes to establish his freedom to work with them either together in the session or separately. With child problems, he might exclude the parents in one case and require their participation in another. He has even been known to have a family session with only the patient present by having the patient in trance hallucinate the other family members in the room.

Although he largely works in his office, Erickson will venture out into the community whenever the treatment requires it. He seems as comfortable in the patient's home or place of business, or an airport waiting room, as he does in his own office. Since he often does therapy without calling it therapy, he will work on a person's problems while ostensibly giving only a demonstration of hypnosis before a large group or while carrying on a social conversation. When necessary, he will accompany the patient to the problem situation; for example, when a young man fainted each time he attempted to enter a particular restaurant, Erickson took him there to dinner in such a way that the problem was eliminated. He has even raced a small patient, a little girl, down the street on a bicycle.

The therapeutic hour is rigidly set by many therapists and time is often considered a fixed entity. To Erickson, time is malleable. With some patients, he will work the fifty-minute hour, others he will see for a few minutes, and some patients will be seen in sessions extending over several hours. He is flexible in his scheduling of patients and may see them daily, weekly, or quite irregularly. He will also influence the patient's sense of time with time distortion techniques, he will disorient the patient in time with confusion techniques, and he can eliminate time altogether with amnesia for various experiences.

The duration of his treatment will vary from long-term commitments to remarkably brief therapy. Patients will travel considerable distances to see him for a day or a week, much as they might visit a surgeon. He will have regularly spaced appointments with some patients, but with others, he might see them a few hours spread over many months. It is not uncommon for him to have therapeutic sessions after giving a lecture or seminar, and he has been known to treat by telephone and continue treatment by correspondence.

Just as he will play with time, Erickson will also make therapeutic use of fees paid by patients. He usually requires a set fee, but some patients will be required to set the fee and keep track of it. Others will not be charged an hourly fee but one contingent upon results.

THE TREATMENT APPROACH

Just as Erickson will vary the practical aspects of his therapy, such as the place, time and fee, so does the kind of involvement he has with a patient vary with the patient. Although he will repeat many of the same treatment procedures on similar patients, as anyone with a busy practice must, his approach assumes that what he does must be different with each patient. Carl Whitaker once said that he most enjoyed a treatment session when he could say afterwards, "I never did that before." Erickson expresses a similar pleasure, but it does not seem to come from his desire to be spontaneous in his therapy as much as it does from his endless curiosity about what would happen if he tried something different. When the *n*th case of psychogenic headache, or phobia, comes in the door, he can use any one of several procedures which have worked well in the past. Yet he seems to prefer a variation which fits his own interests at that time and the needs of this particular patient. It is this variety which makes his therapeutic approach difficult to encapsulate in some general theory of therapy. Obviously, there are basic principles on which he operates; one can recognize an Erickson therapeutic procedure as easily as a Picasso painting. Yet to find the regularities in his various procedures and present them in a systematic way requires an oversimplification which does considerable violence to the subtleties of his technique. It is like pointing out that Picasso's paintings are made up of bold colors and quite a few angular lines. However, I will attempt a few generalizations here, as I have elsewhere,² to point up some of the factors his different therapeutic approaches seem to have in common. Although these factors are presented as separate entities, they fit together into a coherent treatment approach.

The Therapeutic Posture

To deal with the varieties of human dilemmas, a therapist must be capable of a wide range of behavior with patients. Don D. Jackson once in conversation characterized one of his major goals in therapy as maximizing his own freedom to maneuver with patients; this theme is apparent throughout Erickson's work. With one patient he might do no more than sit and listen, while with another he offers practical advice and with another he will use complex and subtle directives. He does not mind being severe with a patient and requiring an ordeal, nor does he mind being kind. If he draws a line, it is against offering the usual kinds of reassurance or offering pity to a person in distress; he does not consider that humane or helpful. He can also cheerfully work with patients who like him or those who dislike him.

Erickson believes therapists should not limit their approaches because of loyalty to a method or a teacher. He once described this view in a lecture on hypnotic and therapeutic technique: "One of the important things to remember about technique," he said, "is your willingness to learn this technique and that technique and then to recognize that you, as an individual personality, are quite different from any of your teachers who taught you a particular technique. You need to extract from the various techniques the particular elements that allow you to express yourself as a personality. The next most important thing about a technique is your awareness of the fact that every patient who comes in to you represents a different personality, a different attitude, a different background of

experience. Your approach to him must be in terms of him as a person with a particular frame of reference for that day and the immediate situation. Bear in mind that it is the patient who is the important element in the entire physician-patient relationship and be willing to avoid following any *one* teaching or any *one* technique; express your own personality only to the extent that it is requisite to meet the patient and get that patient to respond to you. Then you need to use the technique, the approach, the manner, the understanding that will enable the patient to orient to what is going to happen.

"I dislike authoritative techniques and much prefer the permissive techniques as a result of my own experience. What your patient does and what he learns must be learned from within himself. There is not anything you can force into that patient. There is little opportunity with the authoritarian technique for the patient to take on the things that you start and then develop them further in the way that meets his needs. But there are times when the patient comes to you because he wants you to take responsibility and there are times when you should take on such a responsibility so you need to be aware of authoritative techniques and willing to use them. However, it ought to be your authoritative technique, not that of someone else."

"You must also recognize that understanding authority is an individual matter. There are some patients who cannot understand unless you take a figurative baseball bat and hit them over the head with it, and if this is the case you ought to do it. But I think you have the privilege of deciding whether the bat shall be of soft wood or of hard wood. Yours is the privilege of defining what kind of a bat you use, and then you use it so that your patient abides by your definition. You can tell a patient, 'Shut up and sit down right now!' That is one kind of a hard wood bat. But you can also say: 'I don't know just exactly when you are going to sit down, but suppose you try to hold that chair down on the floor right now.' You have said the same thing with a soft wood bat and the patient knows it. The patient is grateful to you because that is the kind of a patient he is and because you have used tactfulness or a sort of flippant attitude in manifesting your authority."

"Remember that whatever way you choose to work must be your own way, because you cannot really imitate someone else. In dealing with the crucial situations of therapy, you must express yourself adequately, not as an imitation."

Expectation of Change

It might be assumed that a therapist in the business of changing people would expect them to change, but this is not always so. Underlying the approach of many therapists is a pessimism about the possibility of real change in the life style of a patient. This view might be partly derived from the traditional idea that psychiatric problems are determined from an early age and change is slow and difficult.

Erickson appears to approach each patient with an expectation that change is not only possible but inevitable. There is a sureness which exudes from him, although he can be unsure if he wishes, and an attitude of confidence as if it would surprise him if change did not occur. His positive view is not necessarily affected by the length of time a patient has had a problem or the amount of therapy previously experienced. In fact, he likes the challenge of patients who have failed in previous therapy. Approaching each situation as a new one, he is willing to

assume some changes in life must occur slowly but he also accepts the idea that lifelong habits can sometimes change overnight. Characteristically he acts as if change for the better is a natural development.

Emphasis on the Positive

To Erickson, normal behavior and growth is the process of living and psychopathology an interference with that process. Within the individual, the positive forces are striving to take over, and his therapeutic focus is upon letting that happen. This view arises from his conception of the unconscious, which is in sharp contrast to the Freudian view that the unconscious is a morass of conflicting drives and unsavory types of ideas. To Erickson, the unconscious is a positive force which will arrange what is best for the individual if he stops interfering with it. An analogy he uses is that of walking; to begin to walk consciously is to stumble, while to leave walking to the unconscious means easy locomotion. This view grows out of the emphasis on the positive nature of the unconscious in traditional hypnosis. However, a distinction should be made between what Erickson might say to a patient about the patient's unconscious and what he says about the nature of the unconscious when analyzing that concept.

As a consequence of his positive view, Erickson does not explore the unfortunate thoughts or desires of a patient in any way that indicates there are even worse thoughts and desires outside the patient's awareness. Instead, out of a conversational exploration will come an appreciation of the positive aspects of the patient's thoughts. The same approach is carried by Erickson into marital and family work. He does not focus upon helping a married couple find out how hostile they feel about each other, but he will let them discover the better aspects of their relationship.

Typically what the patient defines as a defect or a sign of an unsavory character will be redefined by Erickson. The large nose on a female becomes that which gives her individuality, and the gap between the teeth of a young lady provides her the opportunity to squirt water playfully at a young man. A major skill of Erickson is the way he enforces a positive view without it appearing mere compensation or reassurance. To Erickson, the positive view is the realistic one.

Emphasis on Accepting What the Patient Offers

The most paradoxical aspect of Erickson's therapy is his willingness to accept what the patient offers while simultaneously inducing a change. Therapy is a process of accepting the patient's way while simultaneously diverting the patient in new directions. It is like diverting a stream of water so that the stream's own force is used to cut a new pathway. For example, in "An Hypnotic Technique for Resistant Patients" he describes his way of dealing with the openly hostile patient:

"There are many types of difficult patients who seek psychotherapy and yet are openly hostile, antagonistic, resistant, defensive, and present every appearance of being unwilling to accept the therapy they have come to seek. . . . Such resistance should be openly accepted, in fact, graciously accepted, since it is a vitally important communication of a part of their problems and often can be used as an opening into their defenses. This is something that the patient does not realize; rather, he may be distressed emotionally since he often interprets his behavior as uncontrollable, unpleasant, and uncooperative rather than as an informative exposition of his important needs. The therapist who is

aware of this, particularly if well skilled in hypnotherapy, can easily and often quickly transform these often seemingly uncooperative forms of behavior into a good rapport, a feeling of being understood, and an attitude of hopeful expectancy of successfully achieving the goals being sought. . . . Perhaps this can be illustrated by the somewhat extreme example of a new patient whose opening statement as he entered the office characterized all psychiatrists as being best described by a commonly used profane vulgarity. The immediate reply was made, 'You undoubtedly have a damn good reason for saying *that and even more*.' The italicized words were not recognized by the patient as a direct intentional suggestion to be more communicative, but they were most effective."

In a similar way he will accept the behavior of the patient who is not openly hostile but frightened. He reports:³

"Ann, 21, entered the office hesitantly, fearfully. She had been hesitant and fearful over the telephone. She expressed an absolute certainty over the telephone that I would not like to see her. Accordingly, she was urged to come. As she entered the office she said, 'I told you so. I will go now. My father is dead, my mother is dead, my sister is dead, and that is all that's left for me.' She was urged to take a seat, and after some rapid thinking I realized that the only possible understanding this girl had of intercommunication was that of unkindness and brutality. Hence, brutality would be used to convince her of sincerity. Any other possible approach, any kindness, would be misinterpreted. She could not possibly believe courteous language . . .

"Her history was briefly taken. Then she was asked the two important questions. 'How tall are you and how much do you weigh?' With a look of extreme emotional distress, she answered, 'I am 4 feet 10 inches. I weigh between 250 and 260 pounds. I am just a plain, fat slob. Nobody would ever look at me except with disgust.' This offered a suitable opening. She was told, 'You haven't really told the truth, I am going to say this simply so that you will know about yourself and understand that I know about you. Then you will believe, really believe, what I have to say to you. You are *not* a plain, fat disgusting slob. You are the fattest, homeliest most disgustingly horrible bucket of lard I have ever seen and it is appalling to have to look at you.' " (Only after six months of this "accepting" did Erickson *let* the girl reduce and become attractive enough to marry.)

It isn't only in his opening maneuvers that Erickson accepts the needs of his patients. The general treatment of a case has this focus. The "acceptance" usually takes the form of accepting a framework but defining it in such a way that change can occur. One can choose an example almost at random from his case studies, but a rather bizarre case reported in "Special Techniques of Brief Hypnotherapy" can be used for illustration. A young man who wished to be drafted had the problem of being unable to urinate unless he did so through an 8 or 10 inch wooden or iron tube. Erickson accepted this need and persuaded the young man to use a somewhat longer bamboo tube. After this agreement that the length and material could be changed, the young man was led to discover that his fingers around his penis also made an adequate tube and finally he was pleased to accept the idea that his penis was in itself an adequate tube.

Erickson puts particular emphasis upon symptoms as being the way the patient communicates with the therapist and this way of communicating must be accepted. If a patient announces that her headaches are a necessity, Erickson will agree with her, but there is then the question of length of headache and frequency and perhaps once a year will do. At times, Erickson's acceptance can be seen as a part of his "contract" with the patient. I recall a farm worker who came to him

and defined himself as a dumb moron. Erickson accepted this label but led the patient to accept the idea that even a dumb moron could learn to typewrite to exercise his fingers, read to improve his home cooking, and even go to college to find out how many courses he would fail. Only after the patient was successful in college did Erickson drop the agreement that he was a dumb moron.

This process of "accepting" would seem to come directly from hypnotic technique where a subject's resistances are not opposed but encouraged. If a subject is asked to have a hand feel light and reports it is getting heavy, the hypnotist says that is fine and it can get heavier yet. Such a response accepts the relationship and defines the resistant behavior as a cooperative change in sensation. Erickson's therapeutic procedures follow in this tradition of accepting and encouraging the patient's offerings. However, accepting a patient's idea that he must be miserable does not necessarily mean that one is reinforcing his need to be miserable as a naive view of conditioning theory might indicate. The acceptance can later be followed by a move for a change, and the change is more likely to happen if the need for misery is first accepted.

Emphasis on the Range of Possibilities

Erickson not only accepts a range of possible therapeutic approaches for himself, but he assumes a range of alternative ways of behaving for the patient. Patients often conceive of their situation as a trap in which there is only one possible solution and this an unfortunate one. Erickson sees life as infinitely various. There are a multiplicity of career choices, a vast variety of ways of dealing with one's intimates, and an infinite number of ways of looking at a single situation. Facing the restricted view of a patient, Erickson might ease a different variation into it, or he might shatter that way of thinking and let the patient discover the multitude of other possible views. His ability to re-label as positive those aspects of life the patient sees as negative is one of the ways he alters the patient's view. He will also use a variety of jokes, puns and puzzles with patients who have a particularly rigid set. When a patient insists he is absolutely right and knows what is so, Erickson will give him the task of putting 12 trees in 6 rows containing 4 each. When the patient is convinced the task is impossible, Erickson will show him how easily it can be done.

Willingness to Take Responsibility

The question of responsibility is a crucial one in therapy. Some therapists argue that the patient should take full responsibility for his life decisions and the therapist should not influence him in any way about these decisions. However, anyone well trained in hypnosis is sufficiently aware of ~~interpersonal~~ influence to know that a therapist cannot *not* influence the life decisions of a patient. It is not a question whether one should take the responsibility of influencing important decisions of a patient, but how one should label where the responsibility resides.

Erickson assumes he is going to influence a patient's life whatever he does, even if he tries not to, and the question is both how to do it effectively and how to label what is happening. If a patient asks for direction, many therapists will only turn the responsibility back upon him. Erickson is willing to operate in that way with some patients, but he is also quite willing to take full responsibility for a decision if he feels it is necessary. He will intervene into a patient's life by re-

quiring a change of job, a change of residence, or a new type of behavior. He is also willing to say to a patient having difficulty with his parents, "you leave your parents to me." At the same time, however, Erickson puts great emphasis upon therapy as a procedure where it is agreed that the patient is to take responsibility for his own life.

While willing to take charge and direct a patient, Erickson is also willing to go to the other extreme and put the entire responsibility for change upon the patient, even letting the patient decide what is to be done in the therapy and how. (Cf. "The Burden of Responsibility in Effective Psychotherapy.") As in all issues of this kind, Erickson assumes that the question of how much responsibility the therapist should acknowledge depends upon the particular patient before him and not upon a general rule.

Blocking Off Symptomatic Behavior

Erickson approaches symptomatic behavior as a type of malfunctioning. His concern is not with the supposed "roots" of the symptom in the ideation of the patient but with its current function in the patient's situation. The therapeutic goal is to change the symptomatic behavior into behavior which is more functional in the developing life of the patient. He approaches the symptom directly and does not discuss with the patient what is "behind" the symptom. In some cases, he may ease a patient into a different style of behaving, while with others he will block off the symptomatic behavior so that it cannot persist. He may do this by relabeling the behavior, by taking it over and changing it under direction, or by providing an ordeal which makes it impossible for the patient to continue with symptomatic behavior. If the patient who is ashamed and guilty of a wet bed can become temporarily ashamed and guilty for having a dry bed, as reported in "Special Techniques of Brief Hypnotherapy," he is being eased out of his symptom. Similarly, if a young man who wets the bed must get up in the middle of the night, take a mile walk, and climb back into that wet bed, then he reaches a point where he must give up wetting the bed. Typically, Erickson arranges ordeals for patients which are useful, such as providing needed exercise. The patient is thereby forced to improve himself since, as long as he continues the ordeal, that is good for him, and if he abandons it because the symptom is gone, that is good for him too.

Therapists who have never worked with direct relief of symptoms have perpetuated the belief that if a patient recovers from one he will develop something worse. This has not been so in Erickson's experience or others who work with similar methods. Usually when a person changes symptomatic behavior in one area, he also recovers from distress in other areas. At times, Erickson may offer an alternative for the symptom; more often, he seems to take it for granted that if the patient is dealt with properly, more positive functioning occurs when malfunctioning behavior is eliminated.

Change Occurs in Relation to the Therapist

Although Erickson has great respect for the force of ideas in changing a person's life, he assumes that an idea most effectively brings about change in a particular kind of relationship. One of his goals is working with patients is to establish an intense relationship; one in which what he says and does is of crucial importance

to the patient. He does not think that the intensity of this relationship just happens, as in a "spontaneous" transference relationship, but that it is a product of the way he deliberately deals with the patient and the patient deals with him. Within the framework of an intense relationship, he will bring about change by arranging cooperation with him or rebellion against him. Sometimes, he suggests ways the patient should behave and the patient cooperates and finds himself changing. At other times, Erickson will persuade the patient to make a necessary change by rebelling against him. For example, he reports the way he motivated a patient in "Hypnotically Oriented Psychotherapy in Organic Disease."

"The plan devised was complex and involved; sometimes it varied not only from day to day but within the day itself so that, outside of certain items, the patient never knew what to expect, and even what was done often did not seem to make much sense to her. As a result, the patient was kept in a striving, seeking, frustrated, struggling and emotional state in which anger, bewilderment, disgust, impatience and an intense, almost burning desire, to take charge and do things in an orderly and sensible manner became overwhelming. (During the writing of this paper, the patient was interested in what was being included and pointed out that many times, 'I hated you horribly, you made me so furious and the madder I got, the more I tried.')"⁴

Often Erickson will report cases in which a patient recovered to prove him wrong. For example, in "Special Techniques of Brief Hypnotherapy" he reports a case of a bride who panicked when faced with consummating her marriage. Erickson gave her an instruction which involved setting the range of days when sexual relations could occur and Erickson expressed a particular preference for Friday. As he puts it, "This listing of all the days of the week with emphasis about the writer's preference for Friday was systematically repeated until she began to show marked annoyance." The following Friday the woman's husband reported, "She told me to tell you what happened last night. It happened so quick I never had a chance. She practically raped me. And she woke me up before midnight to do it again. Then this morning she was laughing and when I asked her why, she told me to tell you that it wasn't Friday. I told her that today was Friday and she just laughed and said you would understand that it wasn't Friday." As in many of his cases treated in this way, Erickson likes to report "The subsequent outcome was a continued happy marital adjustment; the purchase of a home, and the birth of three wanted children at two-year intervals."

At times, Erickson will sharply focus resistance to him on one area in such a way that a patient follows a directive to prove him wrong. For example, in "The Identification of a Secure Reality," he wished to persuade a helpless mother to literally sit upon her troublemaking son for a period of hours. He reports that she had various objections to this procedure; however, she would dissolve these objections because he was focusing her upon one main objection—that she was too heavy to sit upon the boy. When this was the only issue, he proposed that she would find she was hardly heavy enough to hold the boy down and would appreciate having that weight (he was also working on her obesity problem). She didn't believe this was so and wished to prove him wrong. Yet the only way she could prove him wrong was to sit upon the boy; when she did, she found she needed all her weight.

If an issue of winning becomes too important to a patient, Erickson is also willing to let a patient defeat him; once the patient has won, he will be willing

to go along with Erickson on other issues which lead to change.

It is Erickson's ability to find solutions, compromises, and ideas to resolve apparently insoluble dilemmas which makes him appear so clever in his work with patients. Therapists who wish to adopt his approach often feel they could not think of the solutions which apparently come so easily to him. Yet if one attempts Erickson's approach, similar kinds of ideas begin to seem obvious ways of solving problems. The solutions follow as one begins to grasp the premises about therapy which are the basis of this approach.

Use of Anecdotes

Although he does not seem to have written about it, Erickson uses stories and anecdotes when dealing with his patients. He teaches by analogies which are related to the patient's problem in some way, although often in a way that the patient cannot easily discover. These anecdotes may be personal experiences, happenings with past patients, or stories and jokes that are part of the shared culture of Erickson and his patients. Like any good teacher, he puts over ideas with parables, particularly ideas which cannot be communicated in more straightforward ways. At times, he uses stories and anecdotes to "peg" an idea so the patient will not forget it or will accept a possibility which was previously unacceptable. For example, he will sometimes suggest that a person can stop a lifelong habit in a matter of seconds just because of an idea. Then he will report the experience of an orderly in a hospital who had been accustomed to drinking a milkshake at lunch every day for over twenty years. One day while he was making his usual milkshake, a nurse pointed out to him that the supply of cow's milk had not been available for several days and he had been making his daily milkshake with mother's milk. He set the milkshake down and never drank another for lunch, changing a habit of many years duration. Yet all that had changed was the introduction of an idea since the difference in the drink was undetectable.

However, it should be emphasized that Erickson's therapy does not consist largely of discussion or teaching in the usual sense. He combines discussion and action, with the action taking place both in the room and outside of it in the social arena.

Willingness to Release Patients

Although he will take responsibility and direct patients what to do Erickson does not seem concerned about the patient becoming overdependent upon him. The framework he establishes in the therapeutic relationship has built into it the idea that the relationship is temporary to achieve particular ends. Since he does not use "awareness" of the relationship as a way of keeping the patient a distance from himself, both he and the patient can become intensely involved. Yet a part of the paradox of his approach is the way he manages to begin termination with the moment of contact and future disengagement is part of the intensity of the relationship established. Because of his positive view and his respect for patients, Erickson is willing to start a change and then release the patient to let the change develop further. He does not allow the needs of the treatment setting to perpetuate the patient's distress, as can happen in long term therapy. Since he does not see therapy as a total clearance, or cure, of all the patient's present and future problems, he is willing to give patients up. His approach is to remove obstacles which,

once removed, allow the patient to develop his career in his own way. The process of termination also becomes a part of the natural course of treatment with Erickson since he is willing to shift to irregular sessions and recess treatment for periods of time. By recessing and having later follow up sessions, he continues to be important in the patient's life while allowing the patient the freedom to progress.

THE THEORY OF THIS APPROACH

It should be evident to the reader that the therapeutic approach briefly described here does not fit into the usual theories of psychopathology and therapeutic change. There is a discontinuity between the usual way of thinking about therapy and Erickson's approach.

While Erickson was working out his methods, two major theoretical schemes were developed in psychiatry and psychology. These were psychoanalytic theory and conditioning theory. Although they differ in many ways, both of these theories share a number of premises about psychopathology:

(a) The unit of observation and treatment is the individual.

(b) The primary area of concern is the past of the individual. His current situation is of secondary, if not minor, importance as an influence on his behavior. In the psychoanalytic view, the individual is an expression of the infantile neurosis and past traumas which have produced, and continue to have a dynamic influence upon, his perception and behavior. In conditioning theory, the person's current behavior is a product of his past conditioning which is now built into neurological processes.

(c) What an individual says and does is conceived as a report about the processes within him. His symptoms are maladaptive expressions of his unconscious dynamic conflicts or his conditioned ways of perceiving and behaving.

(d) The theoretical problem is to devise metaphors about the processes within the individual which best explain the way he is behaving.

Given this way of defining the psychiatric arena, the goals and techniques of therapy inevitably follow. The therapeutic goal must be to change the processes within the person. In psychoanalysis, the therapist seeks to change the person's unconscious dynamics and in conditioning therapy he seeks to inhibit previous conditioning and develop new percepts. The conditioning therapist attempts to inhibit previous conditioned responses with drugs or reciprocal inhibition procedures, or he tries to condition new responses and suppress old ones with verbal conditioning procedures. In psychoanalysis, the patient is given insight into his unconscious ideation and repressions are lifted as transference distortions are interpreted to him.

Because the therapeutic problem was defined in this way, a rather grandiose idea about therapy developed in psychiatry. Implicit in therapy based upon psychoanalytic and conditioning theory is the idea that successful treatment will "clear" the individual of his problems and he will have no more difficulties the remainder of his life. When the influence of the past is resolved, the individual will no longer be neurotic or psychotic and will deal successfully with all problems of living. Any treatment which does less than this is said to be mere transference cure, social amelioration, suppression of symptoms, or supportive therapy. Unique to

psychoanalysis is the idea that the longer the treatment the more successful the treatment, and brief treatment must by definition be inadequate.

The chief merit of these theories is that they are coherent within their premises and they have been sufficiently worked out to be a body of teachable theory. The chief de-merit is their basic assumption that the individual lives alone and autonomous and is not responding to other people in his current situation. Consequently there is no appreciation, or even awareness, of the influence of the patient's social network, nor is there any awareness of the consequences to his intimates when the patient changes. Since the unit is the single individual, the theoretical framework does not allow a description of both therapist and patient in the interchange. A final de-merit, which applies particularly to psychoanalysis, is the fact that evidence to support the claims that "deep" long-term therapy produces any therapeutic change has never been provided.

Whatever the merits of these traditional theories or the treatment which follows from them, they are largely irrelevant when one wishes to describe the therapy of Erickson. Examining what he does with a patient, it is clear that his unit of observation is not the single individual, nor is he particularly concerned about the past of the patient. He is concerned about the current situation, and he approaches symptoms as ways the patient adapts to that situation. He does not see symptomatic behavior as merely a report about the person's inner state; it is also a way the person is dealing with other people, including himself. He does not approach patients with the idea that he can "clear" them so they can deal with all future problems. Instead, he sees therapy as a way of intervening into the life of a patient in difficulty in such a way that the patient recovers from his current dilemma and is hopefully shifted to a more successful level of functioning in the real world. In his usual practice, Erickson does not use the de-conditioning procedures of reciprocal inhibition or use verbal conditioning procedures, nor does he encourage insight into unconscious processes or make transference interpretations. What Erickson does in therapy is based upon a different set of premises about what psychopathology is and what should be done about it. These premises have not yet been put within a coherent theory, nor will they be until someone provides a theoretical model which describes the processes which occur between people. Erickson has provided a necessary first step in the development of an interpersonal theory by working out operational procedure for inducing changes in the ways people deal with one another.

What Erickson has provided can be illustrated with an idea from communications theory. Gregory Bateson once proposed that every expression of an individual, or message from him, can be viewed as both a report and a command. The person who says "I feel unhappy" is reporting on his state. He is also commanding, or directing, or influencing, the person with whom he is talking if only by indicating "treat me as a person who feels unhappy." Because traditional psychiatry and psychology only placed one person in the field of observation, only the report aspect of the message was noticed. When a person said "I am afraid," his statement was taken *only* as a report about his condition. The theoretical problem was to construct an explanation of his state. As another example, if a person put his hand over his mouth while speaking, he might be described as someone expressing an unconscious desire not to speak. Words or actions of a person were

taken as reports, essentially as clues, about the perceptual and affective processes within him.

What Erickson has added is an emphasis upon the "command" aspect of a message as well as the "report." He assumes a person's statement is addressed to another person and both people should be included in the description. When a hypnotic subject reports that his hand feels light, he is not merely reporting a sensation; in Erickson's view he is also making a statement about cooperation or resistance to the person hypnotizing him. The patient who behaves in an agitated way and says he is too nervous to sit down is not merely reporting upon his state. He is also commanding, or influencing, the therapist to deal with him in particular ways. Because of his way of conceiving human behavior, Erickson's treatment cannot be adequately described within psychoanalytic or conditioning theory because the more narrow focus of those views is limited to the single individual.

There are ideas derived from conditioning theory which are appropriate for describing Erickson's therapeutic approach, but only if one broadens the focus. To Erickson, stimuli are never single; there is not a stimulus and a response nor a single reinforcement. There are always multiple responses and multiple reinforcements all occurring simultaneously and often conflictual in nature. As he has put it, a person can say "no" so that it means "yes, no, maybe, or I wonder if you mean that." Every message is always qualified in multiple ways. Similarly, he tends to think in terms of conditioning a situation rather than an individual. If he can start a wife responding differently to her husband, the husband will in turn respond differently to her, and a new system of interchange will have begun which will continue. This is conditioning by arranging new reinforcements, but to encompass what he does in this framework, one must expand the meaning of those terms to include multiple levels and a social network.

When one reads Erickson's works, he will find that words which have a traditional meaning within a framework of individual theory have a different meaning the way Erickson uses them. For example, the word "symptom" is traditionally used to mean an expression of an unconscious conflict, a manifestation in behavior of something with roots in intrapsychic life. Erickson, in his later writing, tends to use "symptom" to refer to a kind of behavior which is socially adaptive and which is in itself the difficulty of the patient. The symptom is assumed to have a social function and the goal is to change the symptomatic behavior rather than what is supposedly "behind" it. If a symptom has "roots," they are in the social network.

Another term Erickson has re-defined is "hypnosis." Traditionally, hypnosis was the state of an individual. The focus was upon the suggestibility of the subject, his depth of trance, and so on. What Erickson has done is include both subject and hypnotist in the description. When he speaks of "hypnosis," he is not merely referring to the processes within a subject but to the type of interchange between two people. Consequently, his emphasis is upon the hypnotist gaining cooperation from the subject, dealing with resistant behavior, receiving acknowledgement that something is happening, and so on. It is this broader definition of hypnosis which makes it difficult at times to tell whether Erickson hypnotized a patient or not. He used a type of interchange which he considers hypnotic although no formal induction of hypnosis in the traditional sense was conducted. His introduction of

two people into the definition of hypnosis requires a new formulation of that age-old phenomenon.

A more extreme example of his re-definition, or re-conceptualization, of a term is the way he uses the term "unconscious." The unconscious, by definition, has always been a term which applied to one person—a something within that person. Erickson does not view the "unconscious" that way, with a consequent effect upon his therapeutic procedures.

The idea of the unconscious came largely out of the hypnotic investigations in the last quarter of the 19th century. When a subject in trance followed suggestions and could not explain why he was doing what he was doing, it was necessary to postulate a motivating force inside the person which was outside his awareness. Freud carried this idea further with a hypothesis that the unconscious was a part of the mind containing dynamic instinctual forces which determined the ideas and behavior of a person. Freud was also interested in the common language, or logic, of the unconscious of different individuals, as could be seen in similar processes in the dreams of different people. Jung too postulated a similarity in the unconscious of different individuals with his idea of the collective unconscious.

I believe that Erickson in his set of premises has shifted the traditional view of the unconscious. He began by exploring unconscious ideation and the differences between conscious thought processes and unconscious thought processes. An example of this view is in "The Use of Automatic Drawing in the Interpretation and Relief of a State of Acute Obsessional Depression." He then went a step further to consider whether one person's unconscious could read and interpret the productions of another person's unconscious. With Lawrence Kubie, he wrote "The Translation of Cryptic Automatic Writing of One Hypnotic Subject by Another in a Trance Like Dissociated State." They say in that paper, commenting on the fact that one person could decipher accurately the automatic writing of another, "The observation stresses from a new angle a fact that has often been emphasized by those who have studied unconscious processes but which remains none the less mysterious—namely, that underneath the diversified nature of the consciously organized aspects of the personality, the unconscious talks in a language which has a remarkable uniformity; furthermore that that language has laws so constant that the unconscious of one individual is better equipped to understand the unconscious of another than the conscious aspect of the personality of either."

The next step for Erickson was, I believe, to assume that the language of the unconscious was not merely expressive—a report of what was on the person's mind. It was also a way of communicating to another person. That is, we communicate with a conscious language and we also communicate to the other with an unconscious language which we understand and respond to. This unconscious language is in a different code; there is condensation, no sense of time, and so on. The communication is in the form of body movement, vocal intonation, and the metaphors and analogies implicit in our verbal speech.

If one assumes that Erickson operates on the premise that there are at least two levels of communication, one of them crudely called conscious communication and another equally crudely called unconscious communication, then many of the ways he operates become more understandable. He considers an ability to

read unconscious communication an essential skill in a therapist. His own ability to consciously receive kinesic communication is legendary. He likes to point out how important it is that a therapist be able to note when a patient nods or shakes the head in contradiction to the spoken words, or the way a woman covers her purse with a scarf while appearing to give full information, or the innumerable non-verbal communications of all kinds. Routinely, he says, a married female patient will disclose she is having an affair by her way of sitting down in the chair at the first interview, and she does it the same way whatever her social class. However, Erickson does not offer interpretations which attempt to bring the unconscious language into consciousness; he treats them as two different styles of communication each of which is acceptable. In fact, what he seems to mean by "accepting" the patient is an acceptance of this multicomunication style of relating. He would not, for example, point out to a patient that putting his hand over his mouth is an unconscious way of indicating he does not want to talk about something. Instead, Erickson accepts that movement as the patient's quite adequate way of telling him something. To bring the movement to the patient's attention would disrupt the communication and not lead to a beneficial result. In fact, it could cause a patient to try to be aware of ways of communicating which function best outside conscious awareness.

To Erickson, it is reasonable to talk to a patient about one thing while simultaneously communicating about quite different matters. For example, he will give an academic lecture while simultaneously hypnotizing a particular person in the audience, or he will talk about seemingly trivial matters with a patient while simultaneously carrying on through body movement and vocal intonation a conversation about the important concerns of the patient. Many of the body movements which a therapist uses "naturally" are used deliberately by Erickson, such as postural shifts, focusing his body in relation to the patient, or changing levels of his voice to bring about responsive body movement. He uses verbal communication as only one of the many possible ways of communicating, and with hypnotic subjects who did not speak English, he has demonstrated that trance can be induced entirely by non-verbal behavior.

Erickson's comments about "unconscious awareness" belie reasonable from this view. To have an interchange with another person through all "unconscious" means of communication, we must at some level be cognizant of what we are doing or we could not correct ourselves or receive the other person's communication and respond to it. Yet this process can go on without any conscious awareness of what we were doing. Therefore there must be, at least, two levels of "awareness" when we are interchanging two levels, at least, of communication. What is most distinctive about Erickson is his willingness to allow the separate existence of these levels without attempting to call the patient's attention to them. Erickson is willing to communicate in both codes and leave them both functioning separately in the interchange.

The Cause of Therapeutic Change

Implicit in Erickson's way of working with patients is the idea that a psychiatric problem is interpersonal in nature. The ways the patient deals with other people and they with him produces his feelings of distress and restricted ways of behaving. Given this view, the problem of how to change the person becomes one of how

to change his relationships with others, including the therapist. Past theories about the "cause" of therapeutic change do not apply when the problem is conceived in this way. Somewhere in his career, Erickson deviated quite sharply from the belief that a person will change if he learns why he is the way he is or what is "behind" his problem. It is not possible to understand his therapeutic approach by thinking of therapy as a process of bringing unconscious ideas into awareness or of helping the person understand how he deals with others. Erickson does not help the patient understand the relation of his past to his present, nor does he help him understand why he is the way he is or how he relates to other people. His case reports do not include statements which are typical of many therapists, such as, "Let's try to get some understanding of what's behind this," or "Have you noticed that you talk about her in the same way you discuss your mother," or "You seem to be reacting to me like I'm someone else," or "How do you feel about that?" or "You seem angry." His approach does not involve making the person stand off and examine what he is saying and doing (unless the patient really wants such an experience, and then Erickson might provide it quite vividly with hypnotic techniques). Should a patient behave toward him as if he is a magical, powerful person, Erickson does not point this out to the patient. He might make use of the behavior to induce a change, or he might shift the patient's behavior so that he responds differently, but he seems to assume that attempting to make the person more aware would not be helpful. One consequence of his approach is that his ex-patients do not speak the language of psychiatry or think in that ideology. Nor do they use psychiatric interpretations on other people. They achieve normality with no more concern about insight than the average untreated person.

One argument is often offered for the necessity of insight or understanding. It is said that therapeutic change will not persist after treatment without it. There is no evidence for this belief and considerable evidence that change without insight persists. It seems to be Erickson's view that when a person changes, his social situation changes, and the persistence of change is related to the new situation which has been created.

Many contemporary therapists have come to believe that therapy is an "experience" which is in itself causal to change. They may phrase it as an experience of intimacy with another human being, an experience of discovering their places in an existential world, an awareness of new depths of perception through an LSD experience, and so on. Erickson does not seem to view an experience in itself as relevant to change. Although patients will have an experience with him, and often an intense one, it is only productive if it provokes, and directly leads to, a change in the person's daily living.

One theoretical model which seems appropriate for Erickson's therapy is that of teacher and student, yet to say this is to attempt to explain one unknown with another since we do not know much about the process of teaching which induces basic changes in the student. If one thinks of teaching as a process of transmitting information, the model is not appropriate. Thinking of it as a process of developing changes in the teacher's relationship with a student, the model becomes more useful. Erickson teaches a patient to deal with him, and with other people, differently. He does this largely by blocking off the ways the person typically behaves and simultaneously he provides him with new experiences which prove

more successful and satisfying. Quite typically he leads the patient into discovering that what he thought he did not know he already knows. A favorite example of Erickson's is the woman who could not learn to write despite the attempt of many people to teach her. Erickson taught her to make various lines which she was quite capable of making, such as straight lines, circles, half circles, and so on. He then had her put them together and discover that she already knew how to write the letters of the alphabet. It is characteristic of Erickson's teaching that he does not tell the patient what he ought to know, he arranges a situation where the person's own experience validates what he has learned. For example, Erickson once described a case in which a husband benevolently made all the decisions for his wife, imposing a kind of tyranny which produced in the wife only resistance and ingratitude. When Erickson was asked why he did not point out to the husband that this was happening, he replied that there would be no point in explaining the situation to the husband, he wouldn't understand it. By arranging a situation where the husband allowed the wife her own way, Erickson managed to provide the husband with a response from the wife which he had never had before so that he learned to prefer to treat his wife differently.

A key factor in understanding Erickson's therapy is to realize that he does not assume therapeutic change occurs as a result of more awareness or knowledge in the usual sense. He does not teach the patient what he should know. Instead, he arranges a situation which necessarily requires new behavior from the person and consequently a different experience of living. He seems to assume that man is not basically a rational animal but a learning organism which only learns through the action of an experience.

If one takes these many aspects of Erickson's therapy and puts them together, a general approach to treatment appears. He approaches each new patient with an expectation that a unique treatment operation might be appropriate for this particular person and situation. He also assumes a range of possible therapeutic settings; he might work in the office, in the home, or in the place of business. He might see the patient for an hour or for several hours, charge one type of fee or another, and do either brief or long-term therapy. His attitude toward the new patient is an expectancy that the patient will naturally improve when obstacles holding him back are removed. He is willing to take full responsibility for what is to happen with the patient and also willing to decline that responsibility if appropriate. In the first encounter, he accepts what the patient has to offer and defines the relationship as one in which he is willing to work within a framework the patient can already understand. He moves as rapidly as possible toward a change; his moves are to offer alternative experiences, provoke the patient into action which requires new behavior, and move to block off symptomatic behavior which has been restricting the patient. He makes maximum use of the way the patient deals with other people. When he has started changes developing in the patient's life, he is willing to release the patient so that he has the opportunity for further development in his own autonomous way.

This summary of Erickson's approach has been phrased in the most general way, partly because it is difficult to be specific about what he does without pointing to the details of cases he has written up and lectured about. Each case is unique. Another difficulty in generalizing about Erickson is that inevitably there seems to be an exception to whatever one says. He will go to considerable trouble

to emphasize that fact about his work. Once many years ago, a research investigator was engaging in long conversations with Erickson to obtain generalizations about his therapeutic procedures. The young man wanted clear statements about his "method" and Erickson was doing his best to educate him. At a certain point Erickson interrupted the discussion and took the young man outside the house to the front lawn. He pointed up the street and asked what he saw. Puzzled, the young man replied that he saw a street. Erickson asked if he saw anything else. When he continued to be puzzled, Erickson pointed to the trees which lined the street. "Do you notice anything about those trees?" he asked. After a period of study, the young man said they all were leaning in an easterly direction. "That's right," said Erickson, pleased. "All except one. That second one from the end is leaning in a westerly direction. There's always an exception."

At the time of that incident, I thought that Erickson was going to excessive trouble to make a point; yet now whenever I attempt to simplify complex processes, particularly when describing Erickson's work, the experience in Phoenix that afternoon comes vividly to mind.

FOOTNOTES

1. Research on Dr. Erickson's work was a part of Gregory Bateson's project for the study of communication. Many of the conversations with Erickson were conducted with John Weakland as part of a joint exploration of hypnosis and this approach to therapy.
2. *Strategies of Psychotherapy*, Grune & Stratton, 1963.
3. "Hypnosis: Its Renascence as a Treatment Modality," *Trends in Psychiatry*, 1967, Merck and Co., Inc., Vol. 3, No. 3, 1-43.
4. This example also illustrates that Dr. Erickson often has his patients read papers reporting their cases to insure accuracy.

Advanced Techniques of
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